| SEQ ID | SEQ ID NO: | Met | SEO ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 3863 | 34231 | A | 3903 | 174 | 1599 | VLHAVGNQVQGCPGPEVHVCC |
| | | | | | | WRPGCVRLLQLHVVGRADGPE |
| | | | | | | CDLCAVWPGGGDV*PAVPGAV |
| | | | | | | PHVTQCEPQGHPYGEGTGAGA |
| | | | | | | YCAALCGPPGARGHCGQEARQ |
| | | | | ł | | PQVRTCQGQERRRDCQDLL*E |
| l | | | | ŀ | | AGGQEAPGAERPSAG*ASRGTP |
| | | | | l | | RAAATHPPRTASPGEGQHV*VP |
| l | | | | | | AHVGGARPGAWQRHPGLHQY |
| | | | | ĺ | | HRPQHLEPPAQPDEPHQDP*HL |
| | | 1 | | | | PGQRPAPAVEAEPGQQAPS\KP |
| | | | } | | | CPPPEPSAPQDGVPAENGLPQG |
| | | | | 1 | | DP/GAIAPRAQAPDSPCGRCTSP |
| | | | | | | GQQ*YWLGPGAPQRGSSPEWD |
| | 1 | | | | | RP*ATQDGRPRPRPTPAAAICDF |
| | | | | | | G*PREPRGGAPQWAGWGGRRR |
| | | | | l | | **RLRNPQ*PGQP\SGSSGRGPG |
| | | | | | | PRRPSVASSVSE/RVLRGERALS |
| | | l | | | | PSPEAPLRASGQRANPTTAPAA |
| | | | | | | ECPPYNPRDLCWTPGWLPMGP |
| | | 1 | | | | ESGKRRSRCVEEDAGPALHRQ |
| | | ١ | 2004 | 221 | 1100 | GGTDGET**TGRGGNRPGPYGR |
| 3864 | 34232 | A | 3904 | 331 | 1120 | HKDRFWQLQNDSCFLHSPGER |
| 1 | İ | i | | | } | QWLGGPRSDTFGPQVLFGHVGI |
| 1 | ļ | 1 | | | | CSQRA/HPAGPGHRGLPEGR*PP |
| 1 | | | | | | HRSQRHPPRSRKPYLA*PPDMC |
| | | ١. | | | | VATDRRTQTPRDFPPLGR*KPH GTLRSAACPAGRVSPSPRPRGL |
| | | | | | | PAPPPKSHLCG\PGVRGR*OLLP |
| | | | | | ŀ | PHPGSPKGERGWTASPGAARG |
| | | | | | | GPGPAPAPRP\RASWSOPSVTFP |
| l | | | | | | LPLAGLA/GHPGSRTEPAWKAG |
| | | 1 | | | | GAAARPGPELPRDLLQAGSTDT |
| | | 1 | | | | ASGEOLAAGPWTGKEISGRARP |
| | | | | | | RL |
| 3865 | 34233 | A | 3905 | 2 | 415 | YTILTEK*KLSKLST*W\VHQDQ |
| 2003 | 154233 | l^ | 1,703 | ľ | 71.5 | LQKREELSMEILNK*DQDSEAY |
| | | 1 | 1 | | | PORTVTGEETWLYOYDPPPLPR |
| ł | | [| | | | SLPPPQTHTAPVGA*S/DWGG*E |
| | | | | 1 | | LPPGLNGDKLAHHSPTPFLSFSG |
| 1 | | | | 1 | | LLFVDWL*SQLLSLFGLFTQGVI |
| | | | 1 | | | |
| | L | | l | l | L | RIFI |

| SEQ ID NO: | SEQ ID NO: of peptide sequence | Met | SEQ ID NO: in USSN 09/540,217 | Nucleotide location of first codon for peptide sequence | Nucleotide location of last codon for last amino acid of peptide sequence | Amino acid sequence (X-Unknown, *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
|---------------|--------------------------------------|-----|-------------------------------------|--|---|--|
| 3866 | 34234 | A | 3906 | | 4527 | MGFCCRECRPRLLKGRPCIQHA GPVAAFKVATFYSLYVCPEGG VTVTLTCRLLGPVDKGHDVTFY KTWYRSSRGEVQTCSERRPIRN LTFQDLHLHHGGHQGAAYTSHD LAQRHGLESASDHHGNFSITM NLTLLDSGLYCCLVVEIRHHHS EHRVHGAMELQVQTGKDAPSS CVVYPSSSQDSESNHGNNFRIH VSNGLLMRCPRPLDRERNSSH LLIVEAYNHDLGPMRSSVRMKK LRQSTALAQHWTGTALDR |
| 3867 | 34235 | A | 3907 | | 2180 | MALTFPC KREEWYGROGPEVE YSVPASHOLKATDADGGFGR VWYRILHGNHGNNFRIHVSNG LLMRGFRICHERSSYLVINE AYMHOLGPWRSSYRMRKLRQS TALIDSTGQAQHWTESKSOFR SPVAPTCSART-QTSASWHLCL SGKSHHAWPPTFFKLYYVHE YSVENEY SPVAPTCSARF-QTSASWHLCL SGKSHHAWPPTFFKLYYVHE NED EAPVFTQQYSRLGLRETAGIG TSVIVVQATDRDSGDGLNTY LLSGAEGKEIDESTGLIITVNY LDVETKTSYMMNVSATDQAP FNQGFCSVYITLLNELDEAVQF SNASYEAAILENLALGTEIVRV QAYSIDNLNQITYRFDAYTSTQ AVSTONLTILLSPORVLRLEVEMELIQD ANQSATRRCAENYNRGVVEPL RAQQSYLAGEAGRHCHGGGF VECEREGIQVTECFGEWMPDR SDMSCHAFTFAGTFOR WENDERSCHEFF STAVITYDGLVDREKGDF YTLTVVADDGGFKVDSTVSG TRVYITVLGSCHONSPREDFFKSDH STYVITYDGLVDREKGDF YTLTVVADDGGFKVDSTVSG AVSIPEDCPVGRVATVKAWD PDAGSNGQVYFSLASCNIAGAF EUTYTINDSIGEVYARTIOREL DHYILQVASDRGTPRKCHH LOYTLDINDFPVIESPFGYNV SVNENVGGGTAVVRATDRD IGINSVLSYTIEGNMTFRM BUSISGELTRPAPPDERERGSFYH |

| SEQ ID NO: | SEQ ID NO: of peptide sequence | Met | SEQ ID NO: in USSN 09/540,217 | Nucleotide location of first codon for peptide sequence | Nucleotide location of last codon for last amino acid of peptide sequence | Amino acid sequence (X-Unknown, *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
|---------------|--------------------------------------|-----|-------------------------------------|--|---|--|
| 3868 | 34236 | A | 3908 | 603 | 1395 | RGPRGSPIFPTRAPREKKR*EE VGGHKKEQIG*GGERKEPPN POHEPKERGVESRYPEEPO/RK RRSARARPKKL*REKRRGGPK RCLW*TGRHSPHIFPTHOC*FF WRK/REEGKERKKEQPAHAGQ KRRKAARHRRRRRRERTDEK KRTWTRRREREAGDEKREGE HGGKRSQQGESRRGGRARTR KERRGKRENDNRARRRQAER EKTKSVKRRQTTQAEEVRQA RENEAREPQORRGIISRRRKEKE EKMAPRSKO |
| 3869 | 34237 | A | 3909 | 1 | 548 | |
| 3870 | 34238 | A | 3910 | 1 | 1803 | |
| 3871 | 34239 | Α | 3911 | 1 | 279 | |
| 3872 | 34240 | A | 3912 | 1 | 506 | MCYSRQSNLGTFGEGKIKGSEV IDECPRSSRYQDLQELQNKTKL TVLEGDILDESCLKRACQDMSV IIHTTSIIDIIGVTHRESIMNINVK RTQLLLEACVQATVPVFIYTSTP EVAGPNSYKEIIQNSHEEEPLEN TWCSPS;PYKKA/LARSGI*ATL QLGGSQEECT |
| 3873 | 34241 | A | 3913 | 3 | 621 | AGQOTVEIDLRHRICULPIDLENG RINNELSRIVLEVERVRVGEQQ EGGHEAGEGRGRQGPRESQPSP AGPRAEAPSKGPDGTTGEDGGE PGDAVAAAEQPAQCGGQGPFV LPVGYSSINEDYPRTCRWMYS TGTYKKEVCLPRHSMHPGPW AICCECQTRFGGRLEVSRVEAA LPYWVPLSLRPRKQHPCWMHA AGTTAGGSAVMS |
| 3874 | 34242 | Α | 3914 | 1 | 430 | RHRIQLPDLENQRNFNELSRIVL EVRERVRQEQQEGGHEAGEGR GRQGPRESOPSPAQPRAEAPSK GPDGTPGEDGGEPGN\AVAAAE QPAQCGQGQPFVLPVGVSSRNE DYPRTCRNW*GCGGYWGLKV GQHGLQRGPQPHT |
| 3875 | 34243 | Α | 3915 | 2 | 1175 | |
| 3876 | 34244 | A | 3916 | 1 | | HLRIHTQESSYVCDECGKALTS KRNLHQHQRIHTGEKPYECSKY \G*PFGLLPQLGHLEHVYSGEKP VLDICRFGLPEFFTPFYW |

| NO: (| of peptide sequence | | SEQ ID NO: in USSN | location of first | codon for last amino acid | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide |
|--------|------------------------|-----------|-----------------------|-------------------|---------------------------|---|
| | | | | | | |
| | | ! | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 2000 | | _ | | | Lanc | |
| 3877 | 34245 | Α | 3917 | 1 | 1396 | MRPQLAGRDHHRGAATLLLER |
| | | | | İ | | PGRLVTHFRQRRGAVRYGGGK |
| | | | l | 1 | | STTQHLSQRRLSGPNDHTKGLV |
| | | | | | | WLLEHILQRLVSFVKLQATRTF |
| | | 1 | | | | TRTYITYAWFLPWGFSGVLCGT |
| | | | | l | | PVDTCWALKHQRIHTGEKPFEC |
| 1 1 | | | 1 | | | SECGKAFNGNSSLIRHQRIHTGE |
| | | | | | | RPYQCEECGRAFNDNANLIRHO |
| 1 1 | | | | | | RIHSGDRPYYCTECGNSFTSSSE |
| | | | | | | FVIHQRIHTGEKPYECNECGKA |
| | | ŀ | 1 | | | FVGNSPLLRHQKIHTGEKPYEC |
| | | | | | | NECGKSFGRTSHLSQHQRIHTG |
| | | | | | | EKPYSCKVCGQAFNFHTKLTR |
| 1 1 | | | | ĺ | | HQRIHSEEKPF*L/CVDCGKAFS |
| 1 1 | | ŀ | | | | AQEOLKRHLRIHTQESSYVCDE |
| 1 1 | | | | | | CGKALTSKRNLHQHQRIHTGE |
| | | | 1 | İ | | KPYECSKYEKAFGTSSOLGHLE |
| | | | ŀ | | | HVYSGEKPVLDICRFGLPEFFTF |
| | | | | l | | FYWKEEKKCGRKMRNEVVHK |
| 1 1 | | | | | | VSFFLVVPIALSSLLKKKWKML |
| | | | | | İ | KKEKAQDPTEYGNLEDDNSQQ |
| 3878 | 34246 | Α | 3918 | 1 | 547 | MDSORPRER/OREREROSEROR |
| 150,0 | 34240 | '` | 3710 | ľ | | HTORMHREAETEDERDWKGH |
| | | | | | | DTKTRRQRQRKRAEEGQCREH |
| | | | i | i | | DRERRRD\RTGERREKORKSTO |
| | | | | | | QSRKPSEEPHREKTQIKRERGPE |
| | | | | l | | QGELERGQCTERNRKA/GTPEC |
| | | | | l | | *TDPHIWTPHPARSAPAHPPDH |
| | | | | 1 | | |
| | | | | l | | TAAKYRPPYRSHHSGITHQHPR |
| 3879 | 34247 | Α | 3919 | 1 | 399 | AASTLKLWPKP |
| | 34248 | A | 3920 | 3 | 872 | KSKLKSEQDGISKTHKLLRRTC |
| | 37270 | ľ. I | 3320 | ľ | 072 | SSTVKTDDVCVTKSHRTFGRSL |
| 1 1 | | | ŀ | 1 | | SSDPRAEOAMTAIKSHKLLNRP |
| | | | | | | CPAAVKSEECLTLKSHRLLTRS |
| 1 1 | | | | | | |
| l i | | | | | | WSGDPRCEHNTNLKPHKLLSRS |
| | | | | | | YSSNLRMEELYGLKNHKLLSKS |
| | | | | | | YSSAPKSSKT*/VFSKEP*RRRG |
| | | | | | | RKALSLPQGLFGYP*HHLHPSSS |
| | | | | | | QLAPNGAKCIPVRDRGFLVQTI |
| l i | | | | | | EFAEQRIPVLNEYCEVCDEPHV |
| | | | | l | | FQNGPMLRRGRDVCEWAKKY |
| | | | | l | | ANSVVRKKFCRLSIARRSRYRA |
| | | | | | | DMDLLRMSNFILTIIYKQKLNL |
| 3881 3 | 34249 | Α | 3921 | 3 | 218 | CCRSHQGAGEGGHLSVQLLWQ |
| | | | | l | | YRWMWCSWGPV\FQFHTDLEL |
| | | | | l | | VAWRCVGLDPGCQQLDIGMQT |
| | | | 1 | ı | ı | |
| | | | | ł | | LIGDHICVF |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \-possible nucleotide insertion) |
| 3883 | 34251 | Α | 3923 | 3 | 962 | RSMRQKVNKDIQDLISALPQAD |
| | | | i | | | LIDIYRTLHPKSTEYTFFSAPHR |
| | | | | | | TYFKIDHIVGSKALLSKCKRTEI |
| | | | | | | TINCLSDHSAIKLELRIKKLTQN |
| | | | | | | RTTTWKLNNLLLNDYWVHNE |
| | | | | | | MKAEIKMLFETNENK/DETYQN |
| | | | | 1 | | LWDTFKA/PSIILNGQKLEAFPL |
| | | | | | | KTGTREGYLLLPLLFNIVLEVL |
| | | | | | | AMAIRQEKE/IKGFQLGKEEVK |
| | | | | ł | | LSLFADDMIVYLEDPIISAANLL |
| 1 | | | | | | RLISNFSKVSGYKINVQKSQTFL |
| | | | | | | YTNNRQTESQIMSELPFTIATKR |
| 1 | | | | | | IKYLGIQLTRDVKDLLKENYKP |
| 1 | | | | | | LFNEIKEDTNKWKNIPCSWIGRI |
| 1 | | | | | | KIVKMAILPK |
| 3884 | 34252 | Α | 3924 | 1 | 1452 | MGDFNTPLSTLDRSMRQKVNK |
| | | | İ | | | DTQELNSALHQADLIDIYRTLH |
| 1 | 1 | | | | | PKSKEYTFFSALHHTYSKIDRT |
| | | | | | | VGSKALLSKCKRTEIITNSLSDH |
| | | | | | | RAIKLELRIKKLTQNRSTTWKL |
| 1 | | | | | | NNLLLNDYWVHNEMKAEIKM |
| 1 . | | i | | | | FFETNENKDTTYQNLWDTFKA |
| | 1 | 1 | | | | VCRGKFIALNAHNRKQERSKID |
| | | | | | | TLTSQLKELEKQEQTQSKASRR |
| | | | | | | QEITKIRAELMEIETQKTLQKSN |
| | | | | | | ESRSWFFERINKIDRPLARLIKK |
| | | | | | | KREKNQIDVIKNDKGDITTDPT |
| | | | | | | EIQTTIREYYKHLYANKLENLE |
| | | 1 | | | | EMDKFLDTYTLPRLNQEEVESL |
| | | | | | | NRPITGSEIVAIINSLPTKKSPGP |
| | | | | | | DGFTVEFY/QEGN*AGEGNKGY |
| | 1 | | | l | | SIRKRRSQIVPVWR*HDCISRKP |
| | | | | 1 | | HRLRPKSP*AGKQLQQSLRIQN |
| | | | | l | | QCTKITSIFIHQ*QANRKSNHE* |
| | | | 1 | l | | TPIHNCFKENKIPRNPPYKGCEG |
| 1 | | | | | | PLQGELQTTAQ*NKRGYKQME |
| | | | | | | EHSMLMGRKNQYRENGHTAQ |

| SEO ID | SEO ID NO: | Met | SEO ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|------------|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | i i | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 3885 | 34253 | Α | 3925 | 11 | 1251 | MKAEINMFFETNENKYTVYON |
| 2002 | 34233 | l^ | 3723 | l' | 1251 | LWDTFKAVCRGKFIALNAHKR |
| | | | | | | KOERSAMNTLTSOLKELEKOE |
| | | | | | | KTNSKANRKQETTKIRAELKEI |
| 1 | | | | | | ETOKTHOKINESRSLFFEKTNKI |
| | | | | | | DRPLARLVKKKREKNOIDAIKN |
| | | | | | | DTGDITTDPTEIQTTIREYYKCL |
| | | ļ. | | l | | YANKLEYLEEMDKFLDTYTLO |
| | | | | | | RLNOEKVESLHRPITGSEIEAIIN |
| | | l | | | | SLPT/KKSPGPDRFTAOFYORY\ |
| | | | | | | DGMYLKIIRAIYDKPTANIMLN |
| | | | | | | |
| | 1 | | | | | GQKLEAFPLKTGTRQGCPLSRL |
| | | 1 | | | | LFNIVLEVLARAVRQEKEINGIH |
| | ł | | | | | LGKQEVKLSLFADGMIVYLENP |
| | | | i | | | IVSAQNLLKLISKFSKVSGYKIN |
| | | | | | | VQKSQAFLYTNNRQTESQIMSE |
| | | | | | | LPFTITTKRIKYLGIQLARDVKD |
| l | | | | | | LFKENYKPLLNKIKEDPNKWK |
| 3886 | 34254 | | 3926 | <u> </u> | 1203 | NIPCSWIGRINIMKMAILPK |
| 3887 | 34254 | A | 3926 | I | 1203 | |
| 3888 | 34256 | A | 3927 | ī | 951 | MKREKNOIDAIKNDKGDITTDP |
| 2000 | 34230 | <u>۱</u> ^ | 3920 | l ¹ | 931 | TEIQTTIREYYKPLYTNKLENLE |
| 1 | | 1 | 1 | | | EMDKFPDTYTLPRLNOEEVESL |
| | l | | | | | NRPITGFEIEA/INSLPTK*SPGAE |
| | | 1 | | | | GFTAEFYQSVGSSGQGNQARE |
| | i | | | | | RNKGYSTRKRGTOIVPVCRWH |
| | | l | | | | DCIFRKLHGLSPKSP*ADKQLQ |
| | | | | | | OSLRIQNOCAKITSIPIHO*OTYR |
| | | | | | | |
| l | l . | | | | | EPNHE*TPIHNCYKENKIPRNTT |
| | | | 1 | l | | YKGCERPFQGELQTTAQ*NKRR |
| 1 | | | | l | | HKQMEEHSMLMDRKNQYREN |
| | | l | | l | | GHTAQGHL*IQCHPHQATNYFL |
| | | | | l | | HRIGKNYFKLHMEPNKSLHSQ |
| | 1 | | | | | DNPKQKEQSWRHHAT*LQTILQ |
| 2000 | 2.055 | Ļ. | 2000 | | | GYSHQNSI |
| 3889 | 34257 | A | 3929 | I | 814 | |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X-Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amine acid | *=Stop codon, /=possible nucleotide |
| 1 | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 3890 | 34258 | Α | 3930 | 1 | 1545 | HQLKVQFRIIISIRSSCDGSAWG |
| 1000 | 34230 | , | 3730 | l* | 13.5 | VAPTFKTRGARSRSRAAIRLGA |
| | | | | | | ADLDEVKSSLVNESENOSSSSD |
| | | | | | | SEAERRPOPVRDTFOKPRDYFA |
| İ | | | | | İ | EVRRPODSAFFKGPPYPGYPFL |
| ì | | | | | | MIPDLSSPYLSNGPLSPGGARTN |
| | | | | | | SSPAPKETWICARFGGVSLSFLE |
| | | | | | | IGSRVLLLGRDVNRSSSLLPAOI |
| | | | | | | PIACHFAVDGGNFIRGKGAYLL |
| | | | | | | TFDLFGNWGLFFLIEIAVWELS |
| | | | | | | |
| | | | | | | AHSSGQSEDALELSRGTCSSSL |
| 1 | | | | | | QLCWTAKALVGKGLDGGPVC |
| | | | | | | KNSGICSTRTKTQEQMSFMEAL |
| | | | | | | YQEGFLRETVVQAVRKVPQTP |
| | | | | | | RKAVLEVLARAISQEKEIKGIQL |
| | | | | | | GKEEVKLSLFADDMTVYLENPI |
| | | | | | | VSAQNLLKLISNFSKVSGYKIN |
| | | | | | | VQKSQAFPYTNNRQTESQIMSE |
| | | | | | | LPFTITTKRIKYLGIQFTKDVKG |
| | | | | | | LFKENYKPLLNEIKEDTNKWK |
| 1 | ľ | | | | | NIPCSWIGRINIVKMAILPKVIY |
| | | | | | | RFNAIPIKLPLTFFTELEKTTLNF |
| | | | | | | IWNQKSR\IGKKILSKKNKAGGI |
| 3891 | 34259 | Α | 3931 | 693 | 1464 | ARAÉVKLSLFADDMIVYLENPII |
| | | | | | | *ARAEVKLSLFADDMIVYLENP |
| | | | | | | IISAQNLLKLISKFSKVSRYKINV |
| | | | | | | QKSQAFLYTNNRQTESQIMSEL |
| | | | | | | PFTIATKRIKYLGIQLTRDVKDL |
| | ŀ | | | | | FKENYKPLLNEIKEDTNKWKNI |
| 1 | | | | | | PCSWIGRINIVKMAILPKVIYRF |
| I | İ | l | | | | SAIPIKLPMTFFTELEKKNWLAI |
| 1 | | l | | | | CRKLKLDFFFIPYTKINSRWIKD |
| I | | l | | | | LNVRPKTMKTLEESLGNTIQDI |
| 1 | l | l | | | | GIGKDFMTKTPKAMATK/DOKS |
| 1 | | | | | | FCTAKETTIRVNRQPTEWEKIF |
| | | | 1 | | | AIYPSDKGLIS |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | | *=Stop codon, /=possible nucleotide |
| | sequence | į . | 09/540,217 | codon for peptide | of peptide sequence | deletion, \-possible nucleotide insertion) |
| ĺ | | | | sequence | | |
| 3892 | 34260 | A | 3932 | 211 | 2519 | ENRKSNCLCLQMA*LYI*KIPSS |
| | | | | | | OPKISLS**ANLAKSODTKSMC |
| | | | | l | | KNHKHSYTLITDKORAKS*VNS |
| | l | 1 | | | 1 | HSQLLQRE*NT*ESNLQGM*RT |
| | | ŀ | | | | SSRRTTNHCSTK*KRTOTNGRT |
| | | | | | | FHAHG*EESIS*KWPYCPSKC/K |
| | | ŀ | | | | RTEITNSPSDHSTNKLELRIKKL |
| | | | | | | TONHTITWKLNNLLLNDSWVN |
| | 1 | l | | | ľ | NEIKAEIKKFFETNENKKTTYO |
| | İ | | | | | NLWDTAKAVLRGKFIALNAHI |
| | 1 | 1 | l | | İ | GNLERSKIYTLISQLKEPERQEO |
| 1 | | | | | 1 | TNPKASRROEITKIRAELKEIET |
| | | 1 | | | | OKTLOKINESRSWFFENIKIDRO |
| | | | ļ. | | ŀ | LARLIKKKREKNOIDTITNNKG |
| | 1 | | | l | | DITTDPIEIQTTIREYYKYLYAN |
| ļ | | | | | | KLENLEEMDKFLDTYTLPRLNC |
| | 1 | l | | | | EEVESLNTPITGSEIKAIINSLPT |
| | | ı | | | | KRSPGPDRSTAE/FYHRYKEEL |
| | | | | | | VLFLLKLFQSTEKEG\GRDTTK |
| | | 1 | | | | KENFRPISLMNIDAKILNKILAN |
| | 1 | l | | | | RIQQHIKKLIYHDQVGFIPGMQ |
| | 1 | | | | | GWFNICKSINVIFQYTNNRQTES |
| | ł | l | i | | | QIMSELPFTIASKRIKYLGIQLTR |
| | l | 1 | | | | DVKDLFKENYKPVLNEIRGHK |
| | ļ. | 1 | | | | QMEEHSMLMDRKNQYCENGH |
| | 1 | 1 | | | | TAQGNL*IQCHPHQATNDFLHR |
| 1 | | l | 1 | | | IGKEEVKLSLFADDMIVYLENPI |
| 1 |] | | 1 | i | | ISAQNLLKLISNFSKVSAYKINV |
| l | | | | | | QKSQAFRYTNNRQTESQIMSEL |
| | 1 | l | 1 | | | PFTIASKRIKYLGIQLTRDVKDL |
| l | 1 | | l | | 1 | FKENYRPLLNEIKEDTNKWKNI |
| | | | | | | PCSWVGRINIVIMAILSKVIYRF |
| 3893 | 34261 | Α | 3933 | 2 | 1304 | |
| 3894 | 34262 | В | 3934 | I41 | 2008 | |

| SEQ ID NO: | SEQ ID NO: of peptide sequence | Met hod | SEQ ID NO: in USSN 09/540,217 | Nucleotide location of first codon for peptide sequence | Nucleotide location of last codon for last amino acid of peptide sequence | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
|---------------|--------------------------------------|------------|-------------------------------------|--|---|--|
| 3895 | 34263 | A | 3935 | | 1845 | MVISVDAEKTFNKIQOPFTLKT LNKLGIDGSYLKIIRAIYDQPTA NIILNGGKLEAPPLKTGRRGGC INSPLENTIVLEVLARAIRGEEEI KGIQLGKEEVKLSLFADEMIYY LENPIVSVQNLLKPIRNFSKVLG YKINVQKSQAFLYTINRHTISQI MSELPFTIATKEMKYLGIQVTR YKDLFKENYPPLLNEVKEDT NKWKNIPCPWIGRINILKMAIL PYKELEKTTLKFIWNQKRACIAK SILSKKNKAGGITLPDFKLYYK ATVTKTAWYWYQNRDIDQWN ATTEPSDIIPHIYNHLIFDKPDKNK KWGMGSLFNKWCWENWLAIC REKLKLDPFLTPYTKINSRWIKD LNVRKTIKTLEENLGNTIQDID MGKDPMSKTPKAMATKAKIDK UDLTKLRSFCTAKETTIKVNRQ PKEWEKIFAIYSSDKGLISRIYK ELNFTRKINNPIKKWAKDMIN PKEWSKIPAIYSSDKGLISRIYK ELNFTRKINNPIKKWAKDMIN FYFKEDIYAANRHIKKCSSSLA IREMGIKTTMRYHLIFDVRMISKIK KKSGNNRTRENYYFKIHMESKIK |
| | | | | | | QNSQGNRIRENTFRIMMESKRS QNSQGNRKEKEQSWRHHATRL QTIVQGYTVAKTACYWYKNRP TDQSNRTENQEIRLHTYNHLIF DKPDKSNGETTPYSINGARITG |
| 3896 | 34264 | Α | 3936 | 1 | 700 | |
| 3897 | 34265 | Α | 3937 | | 3489 | MKSGHPEKEQDNSDVQETREIT IRGLLCTALMRHSTGAIA/YLUV LSGSASLKLAGVPI.RCCEGDKD AGHPLETQTALCERGRGARSLV. GNIIMTSQPVPNETIIVLPSNVIN FSQAEKPEPTNQGQDSLKKHLI. AEIKVIGVNLIQNVLERGWGKC QEMIYVLGLDICRPFFVSRVSEE GRMGQIKGEDANALDFPASLL CLICQEGGVMGESCSPVGMYH REIVPVYEVLSVITGLQIQVFSG KEADSVIKS |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | eodon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 3898 | 34266 | A | 3938 | 120 | 1331 | TSLGPIYCAVRHTSSCRKVGSSR |
| | | | | l | | CQHGCQLSVRLQLDQAHHKQL |
| | | | | | | PWLAPKNAVVPKSLEDPQGRK |
| | | | İ | | | EGVTALTPEAPRSGPPKRLQLFP |
| | | | | İ | | PSLCPNCSKQGAYFSPFGVTAT |
| | | | l | | ĺ | LLATPFSRSRVLVLOPGRMRYA |
| | | | | | | DKWRVSKMKRCCIEOWNSSEK |
| | | | | 1 | | THSARASHSLORORGGPRVGGS |
| | | | l | l | | SLQAGCHVISAALSKEEALEWV |
| | | | | | | ASFCRQIVQSYLRPLLCSGADP |
| | | | ł | | | GAFMDLRGEELRSLELSLSYTP |
| | | | l | | | PSNEFKISMKLEAQDPRNTTST |
| | | | ŀ | | | CIATVVGLTGARLRLRLDGSDN |
| | | | | | | KNDFWRLVD\$AEIQPIGNCEKN |
| | | | | | | GGMLQPPLGDSFHCDVRVSILD |
| | | | l | 1 | | LFCFLLSELPFTIDTKRIKYLGIO |
| | | l | | ŀ | | LTKDVKDLFKENYKPLLNE/IK/ |
| | | | | | | EDTNKWKNIPRSRIG*INIVKMA |
| | | l | | | | ILPKDFG |
| 3899 | 34267 | Α | 3939 | 1 | 1421 | MDSMSGGGQYRKINGNPTSVK |
| | | | | | i | CPLLLLPAILTPEPVNRWRQSC |
| | | İ | | | | KAFARHSPLAFRVTISTSTFFDG |
| | | l | | | | LLVTGLYTSTSVQASQSIGGSSA |
| | 1 | l | | | | FGFVLEVLARAIRQEKEIKGIQL |
| | | | | l | | GKEEIKLSLFAGDMIVYLENPIV |
| | | 1 | | | | SAQNLLKLISNFSKVSGYKINV |
| | | 1 | | | | QKSQAFLYTNNRQTESQIMSEL |
| | | 1 | | | | PFTIASKRIKYLGIQLTRDVKDL |
| | | 1 | | | | FK\ENYKPLLKEIKEDTNKWKN |
| | | 1 | | | | IPCSWVGRINIVKMAILPKNWK |
| | | | | l | | KLKFIWNQKRAHIAKSILSQKN |
| | | | | ĺ | | KAGGITLPDFKLYYEATVTKTA |
| | 1 | 1 | | | | WYWYRNRDIDQWNTTEPSEIM |
| | | 1 | | | | PHIYNYLIFDKPEKNKKWGKDS |
| | 1 | | | | | LFNKWCWESWLAICRKLKLDP |
| | | 1 | l | l | | FLTPYTKINSRWIKDLNVRPKTI |
| | 1 | | l | | | KTLEENLGITIQDIGMGKDFMS |
| | | 1 | | | | KTPKAMATKAKIDKWDLIKLK |
| | | | | l | | SFCTAKETTIRVNRQTTKWEKI |
| | 1 | 1 | l | | | FATYSSDKGLISRICNELKQIYK |
| | | | | | | KKTNNPIKK |

| SEQ ID NO: | SEQ ID NO: of peptide sequence | Met hod | SEQ ID NO: in USSN 09/540,217 | Nucleotide location of first codon for peptide sequence | Nucleotide location of last codon for last amino acid of peptide sequence | Amino acid sequence (X-Unknown, *-Stop codon, /-possible nucleotide deletion, \-possible nucleotide insertion) |
|---------------|--------------------------------------|------------|-------------------------------------|--|---|--|
| 3900 | 34268 | A | 3940 | 3 | 1566 | IIOTTIGEYYKHLYTNKLENLEE MDKFLDTYLPRLNQEGESLK RPMAGSEIEAIINSLPTKNSPGP DRETAEFYQRYKEELLISNFSK VSYNIQNQWEKTISIPHO'QTINR EPNHE'TPHNCEKENKILGIQL TRDVKDLFKENYKPLLISNFSK KRYKYGMEKALELLARAIRQEK EIKGIQLGKEEVKLSLFADDMI VHLENPIISAONLLKLISNFSKV SGHKINVQSKOTFLYTNNRQTE SQHISHOVAGNETALELLARAIRQEK EIKGIQLGKEEVKLSLFADDMI VHLENPIISAONLLKLISNFSKV SGHKINVQSKOTFLYTNNRQTE SQHISGLPFKIATKRIKYI GIQL TRDVKDLFKENYKPLLNETKED TIKKWKKNILSSWIGRINVKMA ILPKUYJRFNAILINLPMTFFFEL EKTTLKFIWYGKRACIAKTILSQ RNKAGGITLRDFKPYYKALTETK TASEMKYYLENKIPFKVLHMV NYPHTPHFGDLHPNTKVVSL PPNITSLIEPMNQQVISAFKDCY LEFTTUSTEVENKIPFKVLHMV PHTPHFGGLHPNTKVVSL PPNITSLIEPMNQQVISAFKDCY LEFTTUSTEVENKIPFKVLHMV QFWKDYNT QFWKDYNT |

| NO: of | EQ ID NO: peptide quence | Met hod | SEQ ID NO: in USSN 09/540,217 | location of first | Nucleotide location of last codon for last amino acid of peptide sequence | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
|---------|------------------------------------|------------|-------------------------------------|-------------------|---|---|
| 3901 34 | 4269 | Α | 3941 | | 2580 | MWKGSIQQEELTILINYAPNITO APRSIKQVLSDLQRDLOSHTIM GDENTPLSTIDRSTRQKVSKDI QELNSVLHQADLIDIYRTLIPIK STECTFFSAPHITYSKIDHIVGS KALLSKYKRTEIITNCCSDHSAT. KLELRINKLTQNISTTWKLNNL LLNDYWHNEMKAQIKMFFET NENKDTAYQNLWDTFKANCR KELERNKELTQNISTTWKLNNL LLNDYWHNEMKAQIKMFFET NENKDTAYQNLWDTFKANCR KREIALNAHKRQERSKIDTLT SKLKELEKQEQTLHSKDSRRQC KREIALNAHKRQERSKIDTLT SKLKELEKQEQTHIKSDSRRQC KREIALNAHKRQEPSKIDTLT DIDETYLKIIRAIYDKPTVNILN DIDETYLKIIRAIYDKPTVNILN DIDETYLKIIRAIYDKPTVNILN LCRIMEREVARAIRQEKEIKGIQ LGKEEVKLSLFADDMIVYLEN IBAQNLLKLISNFSKVSGVIGTNWK VIPCSWAGRINIVKNAILPKVI VERNAISNELKSIKSVLGIQLTROVKD LFENKTYLGIQLTROVKD VERNAISNELWEIKTERLEKTT KSFI*KQKRACIAKSILSQKNKA GGITLPOFKLYVYKAIVTKTA WYWYQNEDIDQWNRTEPSEIIP HYNHLIFDKENDKLIKLIDP ELTPYTKINSTRWIKDLHVRPKT IKTLEENLGNTIQDIGMGKDFM TKTTPKAMMATKSKIDKWDLIKL KSFCTAKETTIRVNRQPTEWK KSFTTYPSAMATKSKIDKWDLIKL KSFTTYRSMKJIDSINSPKKOIL |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown. |
|--------|------------|-----|------------|-------------------------------|-----------------------------|---|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 3902 | 34270 | A | 3943 | 15 | 2130 | QRLRRQHRLEQKTRSTTCHMR |
| 3902 | 34270 | ^ | 3343 | ľ | 2130 | QSTTRSAERADTRIESMPT*TTP |
| | | l | | | | *HTDDVP/SHCTNSTHTATTSPS |
| | | | | | | THNHOOTLTRVANVAQIRRTDI |
| | | | | l | | SSIAATEWISTINTHNYACRTRA |
| | | | | | | VSORRYVSDFEKRERPTSNTPE |
| | | | | | | PRFRLVVSTPTLVGTTQGTYQP |
| | | | | | | PPARSRISIASHLLPPLSLLPSSL |
| | | | | 1 | | DLDGRSTLACSSSVSQFSGSRGS |
| | | 1 | | | | PSSYIVATTRVISDVDYDMTTY |
| | | | | | | YNSTITPIS/PSARS*CQRSVHLL |
| | | | | | | LSSHRTYRHPLVSRHTSQEHSL |
| | | | | | | GGPLHRH*YNPVGSRAAAWAS |
| | | | | | | KSALV/SVSLEALVVSALI*LVA |
| | | | | | | TRQRLVGICRTTPIRARSSVVR* |
| | | | | | | VTRYQPNQRAPLIHATYHLLDR |
| | | | | | | GQHPQSMQTISHWTTPPCWCL |
| | | | | | | VCGKKSSLPCCSTSSMSTRRNQ |
| | | | | 1 | | YDTLSLTTSWVL*SSIFWLAFIL |
| | 1 | 1 | | 1 | | LPRTSLPWPTVS*LAANA\SSGS |
| | | 1 | | | | TPVNSSFRT\SVRRSKLVVPANE |
| | | | | | | IETPSFVVVTKFSRSASSYDCSIE |
| | | | | | | YASTYAINITIVNSYVFA/PTHTT |
| | | | | | | REHTISYALTSPGQPQNKTRIPE |
| | | | | | | LQWAF*AVRPSTQ/PSTVIYHAP TSOAIASCALHSLLGCLLGSAT |
| | | | | | | APLPPTWTTPPPPPOLRTT*STG |
| | | | | | | SLPHPPSC*TRP*PLAPRN*PFTG |
| | | | | | | MSSQHCIPT*PQLASHSIALRG/S |
| 1 | | 1 | | | | RARPTTSQTSIAS/SHSHS*LSHV |
| | | | | | | O*RPLSDORSPLDHHAHSSILYA |
| | | 1 | | | | RASRISCLRVCAV |
| 3903 | 34271 | A | 3944 | 254 | 884 | MTPNYTSRLFLHMGVLFYPFYR |
| 3,03 | 34271 | 1. | | | | RLT*HIRTHINLKGWK/NRHFM |
| | | | | | | OMDTKNAEKALDKIOHRFMIK |
| | | 1 | | | | TLSKISIQGTHF\KIIKAIYGKSTT |
| | | 1 | | | | NTILNGEKLKAFPLRTGIKQGCP |
| l | | 1 | | | | LLPLPFNIVLELLARAIRQEKEIK |
| | | | | | | GIQIGKEEVKLTLFADDMIIYLE |
| | | 1 | | | | NSKDSSRKLPELIKEFSKVSRYK |
| ĺ | | 1 | | | | VNLHKSIALLYTNSDQAENQIK |
| | | 1 | | | | NSTSFTI |
| 3904 | 34272 | В | 3945 | 52 | 843 | |
| | | | | | | |

| SEQ ID NO: | SEQ ID NO: of peptide sequence | | SEQ ID NO: in USSN 09/540,217 | Nucleotide location of first codon for peptide sequence | Nucleotide location of last codon for last amino acid of peptide sequence | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
|---------------|--------------------------------------|-----|-------------------------------------|--|---|---|
| 3905 | 34273 | A | 3946 | | 831 | MEMLYCLIAEAGHISSRMATNT |
| 3703 | 34273 | l^` | 33.0 | ľ | 051 | ANSAGLKPTCVCVALPLPPGRS |
| | | i | | | | APHRSCSOAGRELPGOGPRYYR |
| | | | | ŀ | | HLPOLSILHSIGEGOGCGFWSER |
| i | | | | | | SFKGYPERPAGAAGVCRLQGC |
| | | ı | | | | GRRGRGAPFRTTDFSSRPRGAA |
| | | l | | | | ERADOGPRAGSPWPRTTSGAO |
| | | 1 | | | | RGRAQGQGHTARRRGNSNPGP |
| | 1 | 1 | | 1 | | SRARQASRRRRPATSGPPRGSP |
| | | 1 | | ļ. | | RPDRPRRRSPFYRSSSRETSRPP |
| | | 1 | | | | EGPRRPRAPALSAPAPGOPARP |
| | | 1 | | | | RPREPVPCGAVFTARDRLRPPA |
| | | 1 | | | | ATSHAPFSAANPRR*HRPGGPG |
| l | | 1 | | ŀ | | ARRLGDAQLSRRST/SGAPRCS |
| l | ŀ | 1 | | | | QTRSR*PTCVCVALPLPPGRSAP |
| | | 1 | | | | HRSCSOAGRELPGOGPRYYRHL |
| l | | 1 | | l | | PQLSILHSIGEGQGCGFWSERSF |
| | ł | ļ | | | | KGYPERPAGAAGVCRLQGCGR |
| 1 | | l | | İ | | RGRGAPFRTTDFSSRPRGAAER |
| | | l | | ŀ | | ADQGPRAGSPWPRTTSGAQRG |
| 1 | | l | | | | RAQGQGHTARRRGNSNPGPSR |
| | | 1 | | ļ | | ARQASRRRRPATSGPPRGSPRP |
| - | | | | [| | DRPRRRSPFYRSSSRETSRPPEG |
| | | | | | | PRRPRAPALSAPAPGQPARPRP |
| | | | | | | REPVPCGAVFTARDRLRPPAAT |
| | | | | | | SHAPFSAANPRR |
| 3906 | 34274 | В | 3947 | 250 | 281 | |
| 3907 | 34275 | Α | 3948 | 3 | 639 | DHTCRLRQRLRLRVLVGPVPG |
| | | | | | | AGPAG*KGCYGGRSANHHGAP |
| | | | | | | ASCHLARSSCGPRLPGRYSAQQ |
| | 1 | l | | | | PRARCAASGLCGWTAPAADPV |
| | | | | | | PSEVLASQEVQLLCAGE*SGSC |
| | | | | ĺ | | GPTHADLQPSPGGTGEDGAAR |
| 1 | | 1 | | l | | AKRDLPGSVGERAAAPASGRL |
| | | İ | | l | | RACPGRPAGAPGPRARPPGGTA |
| 1 | | 1 | | l | | ALAQPPRPQGAAARPPSGIGWP\ |
| | | 1 | | l | | GNNGSAQSKGRALMEQAAG |

| SEQ ID | SEQ ID NO: | | SEQ ID NO: | | Nucleotide location of last | |
|--------|------------|-----|------------|-------------------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \-possible nucleotide insertion) |
| 3908 | 34276 | Α | 3949 | 161 | 2377 | SLFHGKVCHFLHEPLPLVYLSL |
| | | | | 1 | | CTGYQLFKPSLISWLEEEEELST |
| | | | | | | LPRVLQEWKMCLKTKGPALW |
| | | | i | | | QDNFCLKTLNGIQLARNQNGEE |
| | | | | | | LYDCKQCEDVFCKHPCLKTNM |
| | | | 1 | | | STQNRGNTSECIQYAKDLLSLY |
| | | | 1 | | | NKTSTIRKVSVFSKHGKSFRL\F |
| | | | | 1 | | *MFRSRESVHKINPLK/CTDYGK |
| | | | 1 | 1 | | AFIYQSYLEAHRKTQSGEKLNE |
| | | | | | | WKQCGEAFTHSTSHAVNVETH |
| | | | | ļ | | IIKNPYECKECGKDFRYPTHLN |
| | | | | | | NHMQTHIGIKPYKCKHCGKTFT |
| | | | 1 | | | VPSGFLEHVRTHTGEKPYGCKE |
| | | | | | | CGKAFGTSAGLIEHIRCHAREK |
| | | | | | | TFKCDHCGKAFISYPSLFGHLR |
| | | | | | | VHNGEKPYEHKEYGKAFGTSS |
| | | | | | | GVIEDRRSNTGQKRFDCDQCG |
| | | | | | | KVFVSFSSLFAHLRTHTGEKPF |
| | | | | | | KCYKCGKPFTSSACLRIHMRTH |
| | | | 1 | | | TEERLYQCKKCGKAFTKCSYLT |
| | | | | | | KHLRTHAGEKPYECMKCGKAF |
| | | | l | | | TERSYLTKHLRRHSGEKPYECK |
| | | ŀ | 1 | | | KCGKAFTERSDLTKHLRRHTG |
| | | ŀ | | | | DKPYEYKDCGKAFVVSSSLVD |
| | | | | | | HLRTHTGYKPYKCNACEKAYS |
| | 1 | | | | İ | RSCVLTQHLKTHAAEKTSECN |
| | | | | | | ACGNSFRNSMCFHDRLKTLTKI |
| | | | | i | | KPYKCKDCGKAFTCHSDLTNH |
| | | 1 | | İ | | VRIHTGEKPYKCKECGKAFRTS |
| | | | | | | SGRIQHLRTHMGEKPFECDQCG |
| | | | | | | KAFA\FSQLVLHI*KHTREKPCG |
| | | | | | | CEECGKTFAVSSSLTEHVKIHR |
| 3909 | 34277 | A | 3950 | 6 | 455 | GLLHERQAEARCSICLDYLRHP |
| | | | | | | MTTDCRHYI*SARIHQCW*ELQ |
| | | ĺ | | | | DISPCPVCLQHCPDKNLKRNFQ |
| | | | | | | LCHMTDIAKQLLTTARRKRKL |
| | | | | | | QGEEPVCRKSDVALFCEKDPEL |
| | | | | | | LCHQYRVSLDH*DH/SPMPIEQ |
| | | | | | | AAAKHRKOFESYIEPLEKOV |

| SEO ID | SEO ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|--------------|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | coden for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 3910 | 124270 | | 2001 | 2 | Linon | WALCHINA CHARLES TO FUNDIO |
| 3910 | 34278 | Α | 3951 | 2 | 1009 | WNGHRMN*MQSSNGLEWN/QS |
| | | | | | | SNGKEWNHRIESNGIIIAWN\Q |
| | | | | | | WYQHQTEKNGIFEWNRRESSN |
| | 1 | | | | | GPEWNHVMEWNG/DNPWTRM |
| | | | | | | QSSSNGIEWNHRMDSNGIIFQW |
| | | | | | 1 | NGNGNHRIGIEWNYDQ\SNEWI |
| | | | | | | QWNQHQTEKNGIIKWNRRESS |
| | | l | | | | NGPEWNHLMEWN/ENNPWTR |
| 1 | | | | | | MQSSSNGIEWNRMESSNGLEW |
| | | | | | | NNH*TESNGSVESSSDGNER/QS |
| 1 | | | | | | SSNGIAWNHHKMESNGINIKW |
| | 1 | | | | | NQMESWN/WN*MNRMELSSNG |
| | 1 | | | | | IEWNQHQTEKNGIIEWNRRESS |
| | | | | | | NGPEWNHLMEWN/ENNPWTR |
| | | | | | | MQSSS/NWNRMESSNGLEWNN/ |
| | | | | | | QLNGIEWNHHRMEMNGIIIEW |
| | | | | 1 | | NRIELWN |
| 3911 | 34279 | Α | 3952 | I | 1494 | MASLLGAPRLAGWASGAGALS |
| | | 1 | | 1 | | RGWAIRPADTGGNLGPVPRVPL |
| | | | | l | | PPDPVLTARWAPGVNSGSQFSC |
| | | | | | | HCQAPILEMGHKGSSPGLGDAE |
| | | | | | | VRAITVQCIRPIDGPQQPPGGGS |
| | | 1 | | | | AGRRLTIPASTQEWAQLPVGRV |
| | | | | | | LANVLTEGGDTGNQPIPQRSLC |
| | | | | | | RPQPCSHAETWGEVEAQVPAQ |
| | | | | | | SNREQPAAAPGCGPGRGETGA |
| | | | | l | | RPETTFSPRRAPPNPYDEEGVR |
|] | | 1 | | | | WSLEFMLCGTDGPVQPVQHQE |
| | | | | | | GPAARLQLIRGGSLILESEGTLR |
| 1 | ł | | | | | G/SPVLQTDQPASHLLHTQGFW |
| | | | | | | A/AALSAVCL/HQNIIHSGSALL |
| | | | | | | APATRAA WEQIQRSEGGTAQL |
| | | | | | | LRRLEGYFSNVARNVQWTYLQ |
| | | | | | | PFVIVTTNMILAVDIFDKFNFTG |
| | | | | | | ARVPWFDAIHEAFPRELESSISF |
| | | | | l | | PANFFKPPEEKEGPLVRPASRK |
| | ļ | | | | | TTPQTTRPGPGTEREAPISR*KR |
| | | | | İ | | HPDDTG*FTFTLGIVYCTPGQLP |
| | 1 | 1 | 1 | l | | PEPYDPNRRSLWLPHWPIINTS |
| | | 1 | l | | | MVSALVYSEGAPLPSPL |
| 3912 | 34280 | Α | 3953 | 1 | 681 | MGQLLDKNTPSHGARTREECG |
| | 1 | ŀ | 1 | I | | RERLCVSPSQTGDTPRTSAYLC |
| | ĺ | 1 | | 1 | | VGGPAWSPLSESRPAGSSGCPW |
| | İ | 1 | 1 | I | | IKPPDPRYSPIGLCSLLTTEMMS |
| | 1 | | l | | | RQPRTDLRGQTNPAA\PSAPVPL |
| | | | l | 1 | | SCSQNLPVWPSLMAGTTWHSP |
| 1 | | | 1 | 1 | | L\SPSCFWHSPGHN*H*CCVSKD |
| | 1 | | | 1 | | *KSLFWEPTA/YSPLLPSTSP/SS |
| 1 | | | | l | | KSMQPPKPRSNADSSVQASLIP |
| 1 | | | | l | | RAMSSPTVSPWIMGNGSQGFD |
| 1 | | | | l | | HIAVSMWDD |
| L | | | L | L | | IIIU A SIMI MIDID |

| SEQ ID NO: | SEQ ID NO: of peptide sequence | Met hod | SEQ ID NO: in USSN 09/540,217 | Nuclcotide location of first codon for peptide sequence | | Amino acid sequence (X-Unknown, *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
|---------------|--------------------------------------|------------|-------------------------------------|--|------|---|
| 3913 | 34281 | Α | 3954 | 136 | 420 | RESRNLSRGEESEDPAEPS\RNG *EHPLCYLQ*EFLQVLTMLQAE GTMHHFRSICQVNRNFLERGH/ SPPSPAPPPETHTGSPRPPSGRSR IRAYLH |
| 3914 | 34282 | Α | 3955 | 1 | 1782 | |
| 3915 | 34283 | В | 3956 | 1 | 3070 | |
| 3916 | 34284 | A | 3957 | 104 | 279 | STTHPSVHE/QEEEEEEEEEE EEEEEEEEEEEEEKKEC SKAQCKHFPLSEVL |
| 3917 | 34285 | Α | 3958 | 1 | 252 | MTVCIHIASEDLPVGRDVEVED SDIHDRDPGLGDKSETPSE/EKK EEEEEEEEEEEEEEEEEEEE EEEEEEEEEEEE |
| 3918 | 34286 | Α | 3959 | 2 | 368 | |
| 3919 | 34287 | A | 3960 | 239 | 432 | CLWLFQEEEEEEEEEED*EEE EEE/EEEEEEEEEEEEE EEEEEEEEKIFLGHRVGI |
| 3920 | 34288 | A | 3961 | | 577 | MQIPSLHKLKKEEEEEEEEEEE EEERRRIGGRGREKKEEEEEEEEE EEEEEEEEKKKEEKKKEE EEEERRKKKERKEEEEEG KEEEEEEEEGEEEEEEG KEEEEEEEEEE |
| 3921 | 34289 | A | 3962 | 327 | 559 | PKGRTPSPSCIHRYPCQTPRPHE P*GCHCPEEK/PRPRVWGPSRC MPLGSVQEKRPCPAPGGVQGSF RVSPLMMLTRL |
| 3922 | 34290 | A | 3963 | 1 | 577 | MQIPSLHKLKKEEEEEEEEEE EEERRRIGGRGKKKEEEEEEEE EEEEEEEEKKKEEKKKEE EEEERRKKKERKEEEEEG KEEEGEEGEEEEEEG KEEEGEEEEEEEECM MCWHIPJORDLYSLGPPAQRF TGSHAELPT*KARRSSSWTAAS RGCAARDPPRRCSPA |
| 3923 | 34291 | A | 3964 | 157 | 272 | WCNGSPLYSGW*LVGMESLGR MHKDLWTRQPNQDQDLQ |
| 3924 | 34292 | В | 3965 | 1 | 3723 | |
| 3925 | 34293 | В | 3966 | 1 | 573 | |

| SEQ ID NO: | SEQ ID NO: of peptide sequence | Met hod | SEQ ID NO: in USSN 09/540,217 | Nucleotide location of first codon for peptide sequence | Nucleotide location of last codon for last amino acid of peptide sequence | Amino acid sequence (XUnknown, *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
|---------------|--------------------------------------|------------|-------------------------------------|--|---|---|
| 3926 | 34294 | Α | 3967 | 3 | 424 | AGGQALQGPGQGRGSQGVVG/ PGTGSSGAQHLGKHYPVLSGGS ERSWGRSHTPAGAGC*VRGRR AGGRPGTGHSRPPGGSCLSPAP PNSARWLGLGAPWQAGAGLR DPGDWRRGQGGPGWAWCPGQ |
| 3927 | 34295 | A | 3968 | 3 | 1238 | PPAQPHTCPPNSTARY RGAERRAWSRGPACTRGPAD WAAAGAGRPCPQRRGVCCTAA VPGAARLSCPTGPGPGDFGRRS LTGQGS*GLGAAFGGWTGALP SWHS*SQGWQTDPVR*VRGTE RDICTGL*QPCPPGGLQTGSGG LEHSLPWPGIQAP*GPNHPCR LPRS*ALSAGGISGGQALQGPG QGRGSQGVVG/PGTGSSGAQH HCCPPYTPPG*HPIPSLLALGPQ SLQPEWAHSGTASGEGHSAGE HYPVLSGGSERSWGRSHTPAG AGC*VRGRRAGGRPGTGHSRPP WQAGAGLRDPGDWRRGQGGP GGSCLSPAPPSASRWLGLGAP WQAGAGLRDPGDWRRGQGGP GWAWCPGQPPAQPHTCPPAGS LPGAAPGVLCAA*GPAAGV*A |
| 3928 | 34296 | A | 3969 | 3 | 415 | GPGPGOSR*TRGPSPGAPRPA ETGRHRSQQSVSSPPVQAPRGKR AMYHSAAELVSRGFPRPPVQAF AEPAGAAEGVHSQPASRQEA/G STEVRGQAHRFVSPPNAGAG GDG/PDPQSLLAPTNRPCPPGGISP ARSEPVPPAPGRAAP*CFPDLPG LAPPLC |
| 3929 | 34297 | В | 3970 | ı | 657 | 2,11,20 |
| 3930 | 34298 | A | 3971 | 125 | 524 | EAEALENQSQPCDTG/PQSAFSP PGSTQHPRSQLSQCKQRYQDLQ EKLLLSEATVFAQANELEK*RV LISIGEPLLKQDSKQVQVDLQD LGYETGGQSKNEAEQEETTSPE HEEHSSRKEMVLVEGLCSEQG |
| 3931 | 34299 | A | 3972 | 1 | 648 | MGQWGLVHFTLEVFHTGDEE EQEYSEVTEHVTEHVYLPAKA KVAKEEEAGIQQARQEGDLEA WQFPVRIHPPDQQENITATFEPF PFKLLKELKQAINQYGPGSPFY MGLIKNIVYSSQMIPTDGPPLT RACLTPAQFLQFKTWWADEAS IQAARNAWQPQINITADQLLG VGGWAGLDAÇFWMQDDAIEQ LGGWAGLDAÇFWMQDDAIEQ LRGVCIRAREKUT*CGEQYPSF |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nuclcotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | | *=Stop codon, /=possible nucleotide |
| | sequence | l | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 3932 | 34300 | Α | 3973 | 350 | 1078 | GSNRRSNRAEQLRGVCIRAWE |
| | | | | | | KVITSGEEQYPSFSIVKQGPREPY |
| | 1 | 1 | | | | TDFIAWLQESLKKVIADSAAQD |
| | | l | | | | IVLWLLAFDNANPDCQAALRPI |
| | | | | | | RGKAHLVDYIKACDGIRGPAG |
| | | l l | | | | RLSWLSLQGRPAGAARCTSSSS |
| i | | | | 1 | | DWKAQLAPGPHAGPLRCPAFR |
| | | | | | | ARQPRLPAVLSAGAAFRDCPLS |
| | | | | | | CVQALLGGSAGPGDRLPGHYS |
| | | | İ | | | ALVALSLPFVKEATMNRWSRN |
| | | | | | | HRSAFFLFSANAHGAEGVLSHT |
| | | | | | | VASR |
| 3933 | 34301 | Α | 3974 | 2 | 630 | WDNCGLWFIPSWNLFTLMMRR |
| | | | | | | KESLMK*QKK*QSRFVCQLKLK |
| ŀ | | | | | | /PAKEGEVYPYPSAPPPYFEEKE |
| | l | | | | | WPDPPDLSFLEDAGQKVIAPVT |
| | | | | | | VQAAPQAIALSSIQAGIQQARR |
| 1 | | | | | | EGDLEA WQFPIRIHPPDQQGNII |
| | | | | | | ATFEPFPFKLLKESKQAINQYG |
| | | | | | | QGSPFVMELLKNVAVSSQMIPT |
| | | | | | | DWDALAQACLTLTQFLQFKTL |
| | | | | | | WADEVSIQAACNA |
| 3934 | 34302 | Α | 3975 | 264 | 634 | WSSRCQHSSRPQASESWFPG*G |
| | | | | | | PSFWPRIQGDEKTGAGGHP*LG |
| | | | | | | C*PGMTGQGFSTKCQHTCLMW |
| | | | 1 | | | GSHWAQEAPENAPGTSCPGSSG |
| | | | l | | | SWVLRSSLQRQKSAWSPG/ASM |
| | | | | | | PAPKMPFLTPSSGFS |
| 3935 | 34303 | Α | 3976 | 3 | 410 | KKKVWREEKERLLKMTLEERR |
| 1 | | | | | | KEYLRDYIPLNSILSWKEEMKG |
| | | 1 | | | | QGPK*\EENTQETSQVKKSLTEK |
| | | | | | | VSLYRGDI/L*VDAIVNAANASL |
| | | | | | | LGGGGVDGCIHRAAGPCLLAE |
| | | | | | | CRNLNGCDTGHAKITCGYDLP |
| | | _ | | | | AKCEYN |
| 3936 | 34304 | Α | 3977 | 74 | 432 | MLHNLRPRTLTTRTRCPSTPS*T |
| l | | | | | | TT*ATPPTTTHGSAGPRAAHLR |
| | | | | | | RTGTRRWRAPRRARSCTRSSPR |
| | | | | | | RARAASTPPLAPARELRSPASPP |
| | | | | | | SCEQSAAPPSGRNGGNFPESIFV |
| | | Ĺ | | | | KTINSN |

| SEQ ID | | | SEQ ID NO: | | | Amino acid sequence (X=Unknown, |
|--------|------------------------|-----|-----------------------|--|--|---|
| NO: | of peptide sequence | hod | in USSN 09/540,217 | location of first codon for peptide | codon for last amino acid of peptide sequence | *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
| 1 | sequence | | 09/340,217 | sequence | or pepade sequence | deletion, v-possible nucleonuc insertion) |
| | | | | | | _ |
| 3937 | 34305 | A | 3978 | 2 | 894 | WGGYGMRTGPRTLTTRTRCPS |
| | | | | | | TPS*TTT*ATPPTTTHGSAGPRA |
| İ | | | | 1 | | RTCAAQRTSGSHPSQRRTSSAA |
| | | | | | | PGV*RANVFPWAH*MKRV*TT |
| | | 1 | | | | LENLTA/PEMAMPPAPHVIFAT |
| | | | | | | DDWAAMVHPSARVPGLDGTG |
| ŀ | | | | | | ALLVPTGVCAPGPCKCPLTSSS |
| l | | | | | | VTHTRLKTTLSVPPSARQTGRC |
| | | | | | | RSPSDLRCSYPPDEQPVCVPKC |
| | | | | | | GSPWVSVLVAWIQSESAVLDPR |
| | | | | ļ. | • | HPQHPYLYPVDMQNLLTNLGE |
| İ | | | | | | PPQARALAAKLLGRPSSSQSGS |
| 1 | | | | | | RVPAVWAQAGNATYITVHTLC |
| | | | | 1 | | SHNTHMSPVRVKRFTHLG |
| 3938 | 34306 | A | 3979 | 157 | 570 | |
| 3939 | 34307 | Α | 3980 | 1 | 936 | |
| 3940 | 34308 | В | 3981 | 257 | 3934 | |
| 3941 | 34309 | A | 3982 | 210 | 4286 | MPLKTRTALSDDPDSSTSTLGN |
| | | | | | | MLELPGTSSSSTSQELPFCQPKK |
| | | | | | | KSTPLKYEVGDLIWAKFKRRP |
| | | ļ. | | | | WWPCRICSDPLINTHSKMKVSN |
| | | | | | | RRPYRQYYVEAFGDPSERAWV |
| | | | | | | AGKAIVMFEGRHQFEELPVLRR |
| 1 | | 1 | | | | RGKQKEKGYRHKVPQKILSKW |
| | | 1 | | | | EASVGLAEQYDVPKGSKNRKCI |
| | | 1 | | | | PGSI\KLDSEEDMPFEDCTNDPE |
| | | l | | | | SEHDLLLNGCLKSLAFDSEHSA |
| | | l | | | | DEKEKPCA\KSRARKSSDNPKR |
| | | | | | | T*L*KRATYNFEAH |
| 3942 | 34310 | С | 3983 | 163 | 309 | |
| 3943 | 34311 | Α | 3984 | 72 | 424 | RNCGTARSQHEPLGSWLQDTP |
| | | l | | | | QPP*TLELAGNLPGD/F*PGPGK |
| | | l | | | | EQGMFVCHPIRQPLPRPLPGSSH |
| | | l | | | | QSMPTAQPPLSSSSALLPALPAG |
| | | l | | | | FPVTQGQWTKLQVQAPAPFHL |
| | | l | | | | PPQVEAV*AFYQKQMLVPCSL* |
| | 1 | l | | | | SMPTAQPPLSSSSALLPALPAGF |
| | | l | | | | PVTQGQWTKLQVQAPAPFHLP |
| L | | L | | ļ | | PQVEAV |
| 3944 | 34312 | Α | 3985 | 1 | 347 | KWQRFVLTGIDTYSRYEFAYPA |
| | 1 | l | | | | CHASTKTTIHGLMEFLIHHHGIP |
| 1 | | 1 | | | | HSIASDQGTHLMAKEVRQWAH |
| | | | | ĺ | | AHGIHWSYHVPHHPEVAGLIER |
| | | | | 1 | | WNE\GLLKSQLQHQLVNRLRRE |
| | L | L | | | | LQCWLG |
| 3945 | 34313 | Α_ | 3986 | 1 | 1716 | |

| SEO ID | SEO ID NO: | Met | SEO ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \-possible nucleotide insertion) |
| 3946 | 34314 | A | 3987 | 1 | 737 | MSSVLLRLIYQLTQKTASFEGG |
| | | | | | | PEQKALQQIQAAVQAALPLGPY |
| | | | | | | DPANPMVLEVSVADRDTVWSL |
| | | | | | | WQVPIGESQLGFWSKALPSSAD |
| | | | | | | NYSPFERQLLACYWALVETEY |
| | | | | | | LTMGHEVTMLPELPIMTWVLS |
| | | | | | | DPSSYKPAPMASWGVPYGQLT |
| 1 | | | | | | EEEKTRAWFTDGSARYTETTR |
| | ľ | | | | | KWTAVAIQPLSRTSLKDSNEGK |
| | | | | | | SSHQQAKNGITVLAGVIDPDYQ |
| | | | | | | DEISL/LTPQWRCHPGSSVWRAS |
| | | | | | | SLGISHPP |
| 3947 | 34315 | Α | 3988 | 2 | 384 | CGRSGYWHSSVATKITRLRML |
| 1 | ŀ | | | | | RPREGRKLPPGDIMIPLN*KLRL |
| 1 | | | | | | PPGS/FLLLSHQAKKGVTMLAG |
| 1 | į. | | | İ | | VTDPDYQDEISLLLHNGGTGKS |
| | | | | | | PHISDTFYGSKVASCQNTGPEK |
| | | | | | | QDETQAQETAVYKSQIFGS |
| 3948 | 34316 | Α | 3989 | 3 | 1273 | |
| 3949 | 34317 | A | 3990 | 3 | 341 | GLGRRQPAGSWPERRPGPSA\R |
| | | | | | | RSTAPRRCGQAES*TERGSQPH |
| | 1 | | | | | QVQGQGRWGVCMKIPSHSGKS |
| | | | | | | PDVSEVSKSRNSIISTAVTHAVV |
| l | 1 | | | - 0 | | APEGLKRNGGGSHLRSSRGHR |
| | | | | | | AVIF |
| 3950 | 34318 | Α | 3991 | 44 | 243 | |
| 3951 | 34319 | A | 3992 | 40 | 558 | LGSIQVMQAVRNAGSRFLRSW |
| | | l | | | | TWPQTAG*QMTAPSSPPPPPGL |
| | 1 | | | | | CSYSCPLSHP/SLPVTVRPWPSPS |
| | 1 | | | | | FSSQQGRGQNA/APGPSAQALD |
| | | | | | | SSKTLRPSRKLNRTRLPATPSSG |
| | 1 | | | | | EPHLDQPSGDPQPLTLARHPPES |
| | | | | | | EPVNFQLCHLLSVGPYANKSEP |
| | | | | | | QPSHLKMRIMLREVVRIT |
| 3952 | 34320 | Α | 3993 | 335 | 581 | RRHLFLQWGQRAWRLQVAAA |
| i | 1 | | | I | I | GTTRPTSAMGIRCSEGAAARAT |
| 1 | 1 | | | l | | AARA*TAGPEPLE/PAANPPPPL |
| | l | | | | | TASALRAPPSFVLPQCTR |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | | Amino acid sequence (X-Unknown, |
|--------|------------|-----|------------|-------------------------------|---------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \-possible nucleotide insertion) |
| | | | | sequence | | |
| 3953 | 34321 | Α | 3994 | 216 | 1159 | SWHGPPGANTVAAAAGPEE\K |
| | | | | | | AALKLRPTHGWPVRATDVHDV |
| | | | | | | ILKASGESEWRGGSRASHQMSF |
| | | | | | 1 | VAMATALGEGVPVRGPAAGSL |
| | | | | | | RLLPGSSAPLGRDAISSCNGVN |
| l | | | | | | GLETTGGRCRHNAPNKRHGDP |
| | | | | | | LLEGAAAR/AQAARA*TAGPEP |
| | | | | | | LE/PAANPPPPLTASALRAPPSF |
| | | 1 | | | | VLPQCTAAPRDPSAAGAAN*G |
| | | | | | | KAQSRNC*NEPFAYGGGTHGT |
| | | 1 | | | | GAGAAVTVAADGN*LGSIQVM |
| | | 1 | | 1 | | QAVRNAGSRFLRSWTWPQTAG |
| | | 1 | | | | PWPSPSF/VFPAGSWPERRPGPS |
| | | 1 | | | | AQALDSSKTLRPSRKLNRTRLP |
| | | | | | | ATPSSAFTLPFQERRAL |
| 3954 | 34322 | Α | 3995 | 1 | 738 | MTKRGHGTAWAVASKSASPKP |
| | | l | 1 | | | WQLPHSVEPVGTEKSRIEVWEP |
| ŀ | | 1 | | | | LPRFQRMYGNTWMSGSSLLQG |
| | 1 | l | | | | NQNLHAERYCNSTLERNDTPIE |
| | | l | | l | | SLKPKRESEDGLGEHNGSTMEE |
| | 1 | 1 | | | | VGAETRVQRHWVRVSMTELAL |
| | 1 | 1 | | | | ASDAHMWGSNPGQRVTGVMV |
| | | l | | | | GECGTMLGDTQVLLSNPCGDR |
| | | l | i | | | ARRAYSTAPDYAVCGNGGKVK |
| | 1 | | | } | | LNEQRFGSTNKQGKAAYWME |
| | | ŀ | | | 1 | ALRPEPLCWQSNYPEAAAVGK |
| | 1 | ŀ | | | | PKAAYTKKLHGEDS*AIPVVTE |
| | 1 | | | | | LGERIAQLLIMLYV\KWGKSEIK |
| | | | | | | RT/G/GFGSTNKQGKAAYWME |
| | | | | | | ALRPEPLCWQSNYPEAAAVGK |
| 3955 | 34323 | С | 3996 | 87 | 329 | PKAAYTKKLHGEDS |
| 3956 | 34324 | Ā | 3997 | 3 | 122 | |
| 3957 | 34325 | Ā | 3998 | 1 | 156 | |
| 3958 | 34326 | A | 3999 | 1 | 353 | - |
| 3959 | 34327 | Α | 4000 | 1 | 201 | |
| 3960 | 34328 | Α | 4001 | 56 | 207 | EEKKEKEKEKEKEK/EEEEEEE |
| | | | | | | EEEEEEEEEEEEEE |
| | | | | i | | EEEEEEEEEEEEEE |
| 3961 | 34329 | Α | 4002 | 1 | 174 | MNRC*RHIYSSNEVH*KEEEEE |
| | | | | | | EBBEBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBB |
| | | | | | | EEEEEEEEEEIPLSSL |
| 3962 | 34330 | Α | 4003 | 1 | 278 | MTSYKFTEPKNGIWQLHEAAQ |
| | | | | 1 | | LDTTYNKLNKKEEEEEE\EEEE |
| | | | 1 | | | EEEEEE\EEGEGEEEEEEEE |
| | | | | | | EEEEEEEEEEEEGVIL |
| 3963 | 34331 | Α | 4004 | 144 | 429 | DLPREEYALLPAGPRRRCRHTH |
| | | | | | | RYEPNPEFGAKHSCPAA*HRAA |
| | 1 | | | | | PATSDTQE*HRSNAFGEEEEEE |
| 1 | | | | I | | EEEEEEEEEEEEEE |
| | 1 | | 1 | I | 1 | EEEEEEEEEEETLFSNM |

| SEO ID | ISEO ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|-------------|-----|------------|-------------------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \-possible nucleotide insertion) |
| 3964 | 34332 | A | 4005 | 3 | 122 | TERREGREEREEREEREERE |
| | | 1 | | ľ | | EEEEEEEEEEEEGEEE\EEEE |
| 3965 | 34333 | B | 4006 | | 300 | |
| 3966 | 34334 | Α | 4007 | 1 | 1226 | MPSSKGVHVHSPPRYLAAKDF |
| | | | 1 | ļ. | | KMINKELTAATFMEVIAEDNRF |
| | | | | | | IYDGIDSNFEPELVFLEFFEALLS |
| | | | 1 | | | FAFICVTDQMTKSYTNVPADD |
| | 1 | 1 | 1 | | | VSGNKHETIYTILNQDAQNKSP |
| | 1 | 1 | | | | SAVMSHESDAAHSDSARSSSSK |
| | | | 1 | İ | | LELSPDVNKIRKSEAMVKEKKK |
| | ı | 1 | 1 | | | ADKKGEKSARSPSSLSDNLDFS |
| | | | | | | KQDGNTTRQEMSPAGVPLLGM |
| ļ. | | | | | | QLNEVKPKKDRQNVQQNEDA1 |
| | | 1 | 1 | ŀ | | QYEESILTKLIVESYEGEKVRGL |
| | | | | | | YEGEGFAAFQGGCTYRVSCPFE |
| | 1 | | 1 | ļ | | NLQEGEEGRLCEECPDEPRRVH |
| | 1 | | | ŀ | | VAGRSMYEGEVVNGMRNGFG |
| | | | 1 | 1 | | MFKCSTQPVSYIGHWCNGKRH |
|] | 1 | | 1 | | | GKVGEVATWRAEKKKKEEEEE |
| | ł | | 1 | İ | | EEEEEEEE\EEEEEEEEE |
| | | | | | | CEEEEEE\CEEEEEEEEEE |
| | | | | | | EEEEEEEEKIRP |
| 3967 | 34335 | Α | 4008 | 453 | 705 | LLSIVQAEAVSENSHPILPRVSR |
| | | | 1 | | | SGWGQKEEEEEEEEEEE |
| | | | 1 | | | EEEEEEEEEEEEEEEEE |
| | 1 | | 1 | | | EEEEEEEEEEEGRRRRSSP |
| | | | | | | SCYSITPELSCKLGHR |
| 3968 | 34336 | A | 4009 | 93 | 705 | ESSTQTCSGFWTGCTALHRWR |
| | | | 1 | | | GMPERCPPESRDS*TRFPQSSLP |
| | | | l | ŀ | | GHKT/SEKEEEENRKEEEEEKE |
| | | | | | | KEK/EEEEEEEEEEEEEEE |
| | | | | ł | | EEEEKEEEEEEEEQEEEEDDEE |
| | | | | ł | | EEEEKSCSVNVSLIELPWDPKA |
| | | | l | | | YSRLAPLSSQPGPAVKVPTEHLI |
| ŀ | | | | | | AKLEDCVQGFTYLTVEKRWAR AVTGAQELGVDYPRNEKCKPH |
| | | | | i | | NNGYDND |
| 3969 | 34337 | A | 4010 | ļ, | 3189 | NNGYDND |
| 3970 | 34338 | A | 4011 | li - | 5127 | |
| 3971 | 34339 | A | 4012 | 209 | 3816 | OGRPTFRFRKYREHHKDTPREE |
| 3771 | 34337 | ľ. | 1012 | 1 | 50.0 | QLQDT*SSDSPKLK*RKKC*GQ |
| | | | | | | PERKVKLPTKGSPSD*KRISRQ/ |
| | 1 | | | 1 | | KTLQARRQSWFFEKINKIDRPQ |
| | 1 | | | 1 | | ARLIKKKREKNQIDTIKNDKGD |
| | 1 | | | l | | ITTDPTEIQITIREYYKHLYANK |
| | 1 | | | 1 | | LENLEEMDKFLDTYTLPRLNQE |
| | 1 | | | | | EVESVNRPITGSEIEAITNSLPTK |
| | 1 | | | | | KSPGPDGFTAEFYQRYKEELVP |
| | 1 | | 1 | | | FLLKLFQPIEKEGILPNSFYEASI |
| | 1 | | | | | LIPKPGRDTTKKGNFRPISLMNI |
| | 1 | 1 | 1 | | | DAKIL |
| | | | | | | |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | 1 | | | sequence | | |
| 3972 | 34340 | В | 4013 | 1 | 3570 | |
| 3973 | 34341 | Α | 4014 | 1 | 2347 | MELKTKARELHDECTSLSSRFD |
| | | | | | | QLEERVSVMEDEMNEMNLPTK |
| | | | | | | KSPGPDGFTAEFYORYKEELVP |
| | | | | | | FLLKLFQSIEKEGILPNSFYEPSII |
| | | | | | | LIAKPGRDTTKKENFRPISLMNI |
| | | | | | | NAKILNKMLANQIQQHIKKLIH |
| | | | | | | HDQVGFIPGMQGWFNIRKSINV |
| | | | | | | IQHINRTKDKNHMIISIDAEKAF |
| | | | | | | DKIQQHFMLKTLNKLVLEVLA |
| | | 1 | | | | RAIRQEKEIKGIQLGKEEVKVSL |
| | | | | | | FADDMIVYLENPTVSAQNLLKL |
| | l | | [| | | IGNFSKVSGYKINVQKSQAFLY |
| | 1 | ŀ | | | | TNNRQTERQIMSELPFTIASKRI |
| | 1 | | | | | KYLGIQLTRDVKDLFKENNKPL |
| | 1 | | i | | | LKEVKEDTNEWKNIPCSWVGR |
| | | | | | 1 | NIVKMAILPKVIYRFNAIPIKLP |
| | | | | | | MTFFTELEKTTLKFIWNQKRAC |
| | | | 1 | 1 | | IAKSIFSQKNKAGGITLPDFKLY |
| | | | | | 1 | YKATVTKTAWYWYQNRDIAQ |
| | | | | | | WNRTEPSEIMLHIYNYLIFDKPE |
| | | | i | | | KNKQWGKDSLFNKWCWENWI |
| | | | | | | AICRKVKLDPFLTPYTKMNSR |
| | | | 1 | | | WIKDLNVRPKTIKTLEENLGITI |
| | ì | | 1 | | | QDIGVGKDFMSKTPKAMATKA |
| | | 1 | ĺ | | | KIDKWDLIKLKSFCTAKETTIRV |
| | | | | | 1 | NRQPTTWEKIFATYSSDKGLISF |
| | | | İ | | | IYNELKQIYKKKTNNPIKKWAK |
| | | 1 | | | | DVNRHFSKEDIYAAKKHMKKC |
| | | l | | | | SSSLAIREMQIKTTMRYHLTPV |
| | | 1 | ĺ | | | RMAIIKKSGNNRKIQ/GGIWCD |
| | | | | | | RIL*R*TTCRVAKEIQSL*RRI/W |
| | | 1 | | | | KRLQRTLSIPVLDAV*PPMF*AS |
| 3974 | 34342 | Α | 4015 | 1 | 5073 | |
| 3975 | 34343 | Α | 4016 | I | 3297 | |
| 3976 | 34344 | Α | 4017 | 1 | 3514 | MELKTKARELREECRSLRSRCD |
| | | | | 1 | | QLEERVSAMEDEMNEMKREG |
| | | | | | | KFREKRIKRNEQSLQEIWDYVK |
| | | ŀ | | | | RPNLRLIGVPESDVENGTKLEN |
| | | | | | | TLQDIIQENFPNLARQANIQIQEI |
| | | 1 | | | | QRTPQRYSLRRATPRHIIVRFTK |
| | | | | | | VEMKEKMLRAAREKDRSTRQK |
| | | | | 1 | | VNKDTQELNSALHQA DLIDIYR |
| | | 1 | | | | TLHPKSTEYTFFSAPHHTYSKT |
| | | 1 | | I | | DHIVGSKALLSKCKRTEIITNYL |
| | 1 | 1 | | I | | SDHSAIKLELRIKNLTKSRSTTW |
| | 1 | 1 | | I | | KLNNLLLNDYW |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | l | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 3977 | 34345 | Α | 4018 | I | 2666 | MVKGSIQQEELTILNIYAPNTG |
| | | 1 | | | | APRFIKQVLSDLQRDLDSHTLI |
| | | | | | | MEDFNTPLSTLDRSTRQKVNK |
| | } | | | | | NTQELNSALHQADLIDIYRTLH |
| | | | | | | PKSTEYTFFSAPHHTYSKIDHIV |
| | | l | | | | GSKALLSKCKRTEIITNYLSDHS |
| | | 1 | | | | AIKLELRIKNLTQSRSTTWKLN |
| | | 1 | ļ | | ł | NLLLNDYWVHNEMKAEIKMFF |
| | | 1 | | | I | EINENKDTTYQNLWDAFKAVO |
| | | l | | | | RGKFIALNAYKRKQERSKIDTL |
| | | | | | | TSQLKELEKQEQTHSKASRRQE |
| | | 1 | | | 1 | ITKIRAELKEIETOKTLOKINESR |
| | | 1 | | 1 | | SWFFERINKIDRPLARLIKKKRE |
| | | | | | | KNQIDTIKNDKGDITTDPTEIQT |
| | | 1 | | | | TIRESYKHLYANKLENLEEMDT |
| | | 1 | | | | FLDTYTLPRLNOEEVESLNRPIT |
| | | 1 | | | | GSEIVAIINSLPTKKSPGPDGFTA |
| | | ı | | | | EFY/PESYL*OTHROYHTEWAK |
| | | l | | | | TASIPFENWIIKTGMPSLTTPIOF |
| | l | | 1 | | | SVGSSGQGNQPGEGNKGYSIRK |
| | | | | | | RGSOIVPVCRRHDCLSRKPHRL |
| | | 1 | | | 1 | SPKSP*ADKQLQQSLRIQNQCT |
| | | | | | | KITSILIHQQQTNREPNHE*TPIH |
| | | | | | | NCFKENKIPRNPTYKGCEGPLO |
| | | | | | | GELQTTAQGNKRGHKQMEEHS |
| | | | | | | MLMGRKNOYRENGHTAOGNL |
| | | | | | | OIOCHPHOATNDFLHRIGKNYF |
| | İ | | | l | | KVHMEPKKSPHRQVNPKPKEQ |
| | ľ | 1 | | | | SWRHHTT*LOTILOGYSNONSM |
| | | 1 | | İ | | VLVPKQRYRSMEQNRALRNNA |
| | i | | | | | AYLQLSDL*QT*EKQAMGKGFF |
| | | 1 | | i | | I**MVLGKLASHM*KAETGSLP |
| 3978 | 34346 | A | 4019 | 824 | 3693 | AWKGTTDRSTRQKVNKDTQEL |
| 3970 | 34340 | 1^ | 7019 | 024 | 5075 | NSALHQADLIDIYRTLHPKSTE |
| | | | | | | YTFF/LAPHHTYSKIDHIVGSKA |
| | | | | | | LLSKCKRTEIITNYLSDHSAIKL |
| | 1 | | | | | ELRIKNFTOSRSTTWKLNNLLL |
| | | | | | | NDYWVHNEMNAEIKMFFETNE |
| | | | | | | NKDTTYONLWDAFKAVCRGK |
| | | | | | | FIALNAHKRKOERSKIDTLTSOL |
| | | | | l | 1 | KELEKQEQTHSKASRRQEITKIR |
| | | | | 1 | 1 | AELKEIETOKTLOKINESRSWFF |
| | | 1 | | | 1 | ERITKSDRPLARLIKKKREKNOI |
| | 1 | | | | | DTIKNDKGDIT |
| 3979 | 34347 | В | 4020 | | 3765 | DTIKNDKUDIT |
| 3979 | 34347 | A | 4020 | 1 | 4791 | |
| 3981 | 34349 | A | 4021 | li - | 3297 | |
| 2981 | 134349 | ΙΑ | 14022 | l <u>'</u> | 3471 | L |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | | Amino acid sequence (X=Unknown, |
|--------|------------|------------|------------|-------------------------------|---------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 3982 | 34350 | IA | 4023 | I | 3170 | MVKGSIOOEELTILNIYAPNTG |
| 3702 | 34330 | Ι^ | 4023 | l' | 5170 | APRFIKOVLSDLQRDLDSHTLI |
| | | | | | | MGDFNTPLSTLDRSTRQKVNK |
| | | | | | | |
| | | | | | | DTQELNSALHQADLIDIYRTI.H |
| ł | | 1 | | l | | PKSTEYTFFSAPHHTYSKIDHIL |
| | | 1 | | 1 | | GSKALLSKCKRIEIITNYLSDHS |
| | | 1 | | | | AIKLELRIKNLTQSRSTTWKLN |
| | | 1 | | 1 | | NLLLNDYWVHNEMKTEIKMFF |
| | | | | | | ETNENKDTTYQNLWDAFKAVC |
| | | 1 | | | | RGKFIALNAYKRKEERSKIDTL |
| | | | ŀ | | | TSQLKELEKQEQRHSKPSRRQE |
| | | | | | | ITKMRAELKEIETQ |
| 3983 | 34351 | A | 4024 | 281 | 3030 | KPRLENYMKNAEASRADAINW |
| | | | | | | KKGY/LVMEDKMNEMKREGKF |
| | | İ | | | | REKRIKRNKQSLQEIWDYVKRP |
| 1 | ŀ | | | | | NLRLISVPESDRENGTKLENTL |
| 1 | | 1 | | | | QDIIQENFPNLARQANIQIQEIQ |
| 1 | | 1 | | ľ | | RTPQRYSSRRATPRHIIVRFSKV |
| | | | | İ | | EMKEKMLRAAREKEIQTNIREY |
| | | | | | | YKHRYANKLENLEEMDKFLNI |
| | | | | | | YTLRRLNQEEVESLNRPIRGSEI |
| | | 1 | | l | | VAIINSLPTKKSPGPDGFTAEYY |
| | i . | İ | | | | QRYKEELVPFLLKLFQSIEKEGI |
| 1 | 1 | | | | | LPNSFYEASII |
| 3984 | 34352 | A | 4025 | 1 | 3290 | MGELITPLSTLDRSTROKVNKD |
| | | | | ľ | | TQELNSALHQGDLIDIYRTLHP |
| | | | 1 | | 1 | KSTEYTFFSAPHHTYSKIDHILG |
| 1 | ŀ | | | | 1 | SKALLSKCKRTEIITNYLSDHSA |
| | 1 | | | | | IKLELRIKNLTONRSTTWKLNN |
| | | | | l . | | LLLNDYWIHNEMKAEIKMFFET |
| | | | | | | NENKDTTYQNLWDAFKAVCR |
| | | | | 1 | | GKFIALNAHKRKQERSKIDTLT |
| 1 | | 1 | | 1 | | SQLKELEKQEQTHSKASRRQEI |
| 1 | | 1 | | | | TKIRAELKEIETQKTLQKINESR |
| | 1 | 1 | | | | SWFFERINKIDRPLARLIKKKRE |
| | 1 | 1 | | İ | | KNQIDTIKNDK |
| 3985 | 34353 | A | 4026 | i | 3573 | RIGIDINGIDA |
| 3986 | 34354 | В | 4027 | 1 | 4251 | |
| 3987 | 34355 | В | 4028 | i - | 3065 | |
| 3988 | 34356 | Ā | 4029 | 965 | 4089 | TWKGTTSTSRCKIMPKYRSTRO |
| 3700 | 34330 | <u> </u> ^ | 4027 | 100 | 4007 | KVNKDTQELNSALHQADLIDIY |
| | 1 | 1 | | l | | RTLHTKSTEYTFF/LAPHHTYSK |
| | 1 | 1 | | l | | IDHIVGSKALLSKCKRTEIITNY |
| 1 | 1 | 1 | 1 | 1 | | LSDHSAIKLELRIKNLNQSRSTT |
| | 1 | 1 | | 1 | | WKLNNLLLNDYWVHNEMKAE |
| | 1 | 1 | 1 | 1 | | |
| | 1 | 1 | | | | IKMFFETNENKDTTYQNLWDA |
| | | | | 1 | 1 | FKAVCRGKFIALNAHKRKQERS |
| | l | | | 1 | | KIDTLTSQLKELEKQEQTHSKA |
| | | 1 | | 1 | 1 | SRRQEITKIRAELKEIETQKTLQ |
| | | | | | | KINESRSWFFERINKIDRPLARLI |
| 1 | I | 1 | 1 | 1 | 1 | KKKREENQID |

| SEQ ID | ISEO ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|-------------|-----|------------|-------------------------------|-----------------------------|---|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *-Stop codon, /-possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleofide insertion) |
| 3989 | 34357 | Α | 4030 | 523 | 3981 | |
| 3990 | 34358 | Α | 4031 | I | 3429 | |
| 399 I | 34359 | Α | 4032 | I | 3156 | |
| 3992 | 34360 | Α | 4033 | 2 | 4943 | |
| 3993 | 34361 | Α | 4034 | I | 6747 | |
| 3994 | 34362 | Α | 4035 | I | 3928 | MAAWNLLLKSYAYWGGLRKE DFHCLDRKTLRTVSFLAALLSY ESIGGKGKLTTRKDIYTENPSV HHHHQRPKVDKTTKMGKKQN |
| | | | | | | RKTGNSKMQSASPPPKERSSSP ATEQSWMENDFEELREEGFRRS NYSELREDIQTKGKEVENFEKN LEECITRITNTEKCLKELMELKT |
| | | | | | | KARELREECRSLRSRCDQLEER VSAMEDEMNEMKREGKFRDK RIKRNEQSLQEIWDYVKRPNLR LIGVPESDVENGTKLENT |
| 3995 | 34363 | A | 4036 | 1 | 3638 | |
| 3996 | 34364 | A | 4037 | 3 | 3585 | SNSHITLTLNYNGLNAPIKRHR LANWIKSQDPSVCCIQETHLITC ROTHRIKIGWREIYQANGKQK KAGVAILVSDKTDFKPTKIKRD KEGHYMMVKGSIQQEELTTLNI YAPNTGAPRFIKQVLRDLQRDL DSHTLIMGDFNTPLSTLDRSTR GKVNKDIGDLNSALHQVDLIDI YRTLHPKSTEYTFFSALHHIYSK IDHIVGSKALLSKYKTTEIITNC LSDHSAIKLELRIKKLTQNRSTT WKLNNLLLN |
| 3997 | 34365 | В | 4038 | 877 | 8907 | |
| 3998 | 34366 | A | 4039 | | 450 | QGSPSGSRE*NSQSSAGPQCALP PAMA*VPLSWRSMGKWKKT SCTSDST*PPSERRHWRSRKSPS AMPASFRCSSASAREMLP*KKG RCAAGSGIAPGPPETWGRTGGC PGKQATCGVSGPNANGEPVL/K YPSSSSEAHGGPGRNORSD |
| 3999 | 34367 | Α | 4040 | 2 | 522 | |
| 4000 | 34368 | В | 4041 | 102 | 186 | |
| 4001 | 34369 | Α | 4042 | 2 | 5417 | |

| SEO ID | SEO ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 4002 | 34370 | A | 4043 | 45 | 1585 | KOPSGLLKFGNLILKCHPPSLTH |
| 4002 | 34370 | A | 4043 | 43 | 1363 | MLSOPCA\EAPTPDPNWELA\LY |
| | | | | 1 | | IHPSSGIMSATVSFWSIGTA\YLE |
| | | | | | | AQGIWEP\FRRRLS\FEASNPPFD |
| | | | | | | VGRPFDLRRIVGISSEGNUNTLS |
| | | | | | | |
| | ľ | | | | | CDPGHSRGFCGAGGSSSRPSAG |
| | l . | | | | | SHKQ*GPSGHPHSSHSNRNSAD |
| | ŀ | | ŀ | | | VDDVRAYNSGRTSSMTSAQAA |
| | İ | | | | | SSQPANKTRPLVLDSNTGAQGH |
| 1 | | | | ŀ | | SAGRKSKGAKQSQHGSQHHAH |
| | | | | 1 | | SPLEQHPQPPLPPPVPQPQEPQP |
| 1 | | | | ŀ | | ERLSPAPLAHPSHPERASSARHS |
| | 1 | | | l | | SEDSDITSLIEAMDKDFDHHDSF |
| | l | 1 | | | | ALEVFTEQPPSPLPKSKGSTEGG |
| | ĺ | | | l | | PASTFTQAVDGGIQFFTDCWTE |
| ļ. | | | | | | GPSSSLLAVAREVQLALCIHELL |
| | ļ | | | | | IHGFSQLQVSGGPGAMPDPAAH |
| l | ļ | | | | | LPFFYGSISRAEAEEIILKLAGM |
| | | 1 | | | l . | ADGLFLVRQCLRSLGGYRQLN |
| | 1 | ĺ | | | | GTYAIAGGKAHCGPAELCEFYS |
| | | l | ļ | i | | RDPDGLPCNLRKPCIPPSGLEPQ |
| ļ | | l | | l | | PGSSTACETPWARPRSRPSSARP |
| İ | | | i | | | RRWRSSLLRRTTSGCPGTTAA |
| 4003 | 34371 | Α | 4044 | I | 1773 | |
| 4004 | 34372 | Α | 4045 | 1 | 663 | MALWTLRPTPLLVTCMLICAPG |
| | | l | | | | VMGAVVAPLTILGGPLLIRAAW |
| | | | | | l | YTAGIVGGLSTVAMCAPSEKFL |
| | i i | l | | | | NMGAPLGVGLGLVFVSSLVDQ |
| | i i | | | | | MGRWFVAGGAAVGLGALCYY |
| | 1 | ı | | | | GLGLSNEIGAIEKAVEYWFNSF |
| | 1 | 1 | | | | VCHSNQQNACSHELHDERLLG |
| l | 1 | l | | | | DMGLPILHAMLLRRLPSVDSQN |
| ĺ | | ı | | | 1 | ALSSIMLLHTALP*QSAERLFS* |
| | 1 | 1 | 1 | | | TS**EALG*YGFAYPACNASAK |
| | | 1 | | | 1 | TTIRGLTECLIQHHVTPHSIASD |
| 1 | 1 | 1 | | | | QGTHFTAKEVQQWAHAHGIH |
| | | | | I | i | WPYHVPHHPEAAGL |
| 4005 | 34373 | В | 4046 | 147 | 330 | |
| | | | | | | |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nuclcotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *-Stop codon, /-possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 4006 | 34374 | Α | 4047 | 485 | 1568 | GEGYKADLAAATVECPICQQQ |
| | l | | | ĺ | | RLTLSPQYSHIPQGDQPTTW*Q |
| i | | l | | } | | VDCIGPLPSWEGORFVLTGIDT |
| | l | | | l | | YFRYGFAYPACNASVKTTIHGL |
| | | | | l | | TECLVHHHGVPHGI\ASVQGTH |
| | | | | l | | FMA*EVQQWAHAHGIHWSYH |
| | | | | | | VPHHLEAAGLIEQWNGLLMSQ |
| | | | | l | | LOHOLGDNTLOGWGKVLOKG |
| | | | | | | VYALNQCSIYGTVSPIARIHGSR |
| | | | | | | NOGVEVAPLKITPSDPLAKCLL |
| | | | l | | | PFPKALHSACLEVLVPEGGTLP |
| 1 | | | | | | PGDTTTIPLNWKLRLPPRHFGL |
| 1 | | | | | l | LLPLSQKAKKGATVLAGVIDPD |
| | | | | | | YODEISLLLHIGGKEEYAWNTG |
| | | | | | | DPLGRLLVFPCHVIKVNGKLOO |
| | | | | | | PNPGKTANDPDPSGMKV*VTPP |
| | | | | | | GKKNPRPAEVLAEGK |
| 4007 | 34375 | В | 4048 | 182 | 662 | |
| 4008 | 34376 | Α | 4049 | 1 | 2250 | |
| 4009 | 34377 | Α | 4050 | 1 | 1326 | |
| 4010 | 34378 | Α | 405 I | 1 | 1614 | |
| 401I | 34379 | Α | 4052 | 1 | 2586 | |
| 4012 | 34380 | В | 4053 | 1 | 1954 | |
| 4013 | 34381 | Α | 4054 | 1 | 705 | |
| 4014 | 34382 | Α | 4055 | 1 | 1833 | |
| 4015 | 34383 | Α | 4056 | 1585 | 4128 | |
| 4016 | 34384 | Α | 4057 | I | 1425 | MARG/NAITLPV/CGRAVKFT/L |
| | | | | | | EVLRGDSVEKTSRVWSGNERD |
| | | | | | | QELLTEDALDDLIPSFLLTGQQT |
| | | 1 | | | | PAFGRRVSGVIEIADGSRRRKA |
| | | l | | | | AALTESDYRVLVGELDDEQMA |
| 1 | | 1 | | | | ALSRLGNDYRPTSAYERGQRY |
| i | | 1 | | | | ASRLQNEFAGNISALADAENIS |
| 1 | | 1 | | | | HKAHKYFVFEANTGTETGYQG |
| | | 1 | | | | EESLFNKAYYGGGTNFFRKESQ |
| | | 1 | | | | KLQQSAKKRDAELANGALGIIE |
| | | 1 | | | | LNNDYTLKKVMKPLITSNTVTD |
| 1 | | l | | | | EIERANVFKMNGKWDFADFGT |
| 1 | | 1 | | | | TIKQDFRLLGQTSVDRLLQLSQ |
| | | 1 | | | | GQAVKGNQLLPVSLVKRKTTL |
| 1 | | ł | 1 | I | | APNTQTASPRALADSLMQLAR |
| | | 1 | | | | QVSRLESGQQSSKQKKAIQTAI |
| 1 | | 1 | 1 | 1 | | RKNKEANAVLARLNSELQQQL |
| 1 | | 1 | 1 | I | | KGFADFREPPIKQDFRLLGQTS |
| | | | | 1 | | VDRLLQLSQGQAITELCGAKRV |
| | | | 1 | | | GYFGPTQFYIALKLIAAAQSGLP |
| | | 1 | | I | | VRIESIKCGNSYDHDYEFELGTL |
| | | | L | l | | VLPRSLEGFALSLNCGEHYWL |

| SEQ ID NO: | SEQ ID NO: of peptide sequence | Met | SEQ ID NO: in USSN 09/540,217 | Nuclcotide location of first codon for peptide sequence | Nucleotide location of last codon for last amino acid of peptide sequence | Amino acid sequence (X=Unknown, *=Stop codon, /=passible nucleotide deletion, \=possible nucleotide insertion) |
|---------------|--------------------------------------|-----|-------------------------------------|--|---|--|
| 4017 | 34385 | A | 4058 | 1461 | 2496 | NKRNHQSVCHAFIRIPAAPMV DSLIARVGVWARGNATILPVCG RDVFFILEVLRGDSVEKTSRV WSGNERDQELLTEDALDDLIPS ELLTGQQTPAFGRRVSGVIELAE GSRRRKAAALTESEGTPAFGRR VSGVIEFADGSRRRKAAALTES DYRVLVGELDDEQMAALSRLG NDVRPTSAYERGORYASRLON EFAGNISALADAENISRKIITRCI NTAKLPKSVVALFSHFGELSAR SGDALQKAFTDKEELLKQQAS NLHEQKKAGVIFEAEVITLLTS VLKTSSASRTSLSSRHQFAPGA TVLKGDKRWILNLDRSRVPTE CIEKIEALKELEKPAP |
| 4018 | 34386 | Α | 4059 | 340 | 2067 | |
| 4019 | 34387 | Α | 4060 | 1 | 1959 | |
| 4020 | 34388 | Α | 4061 | 1 | 2319 | |
| 4021 4022 | 34389 34390 | A | 4062 | 964 | 1587 | |
| 4023 | 34391 | A | 4064 | 1 | 1554 | GYSGSKPDVITLLEGGKEPCVV ARDVTRROCPAAPMVDSLIAR VGVMARGNAITLPVCGRDVKF TLEVLRGDSVEKTSRVWSONE RODELLTEGALDDLIPSFLLTGG QTPAFGRRVSGVIEIADGSRR KAAALTESDYRVLYGELDDEG RVASRLQNEPAGNISALADANN ISRKNITRCINTAKLPKSVVALF SHPG/ELSARAASORQOCGYHK LHDKQRLLRG*KGNICAKLINE |
| 4024 | 34392 | В | 4065 | <u> </u> | 1599 | |
| 4025 | 34393 | A | 4066 | 1 | 682 | MKRAPVIPKHTLNTQPVEDTSL STPAAPMVDSLIARVGVMARG NATILPVCGROVEFTLEVLRG SVEKTSRVWSGNERDGELLTE DALDDLIPSFLLTGQOTPAFG RVSGVIELDGSSRRKAAALTE SDYRVLVGELDDEQMAALSRL GGGTQFAFAKENNQKHTKKRT ASLILHAMICCRSLNSSKTKNT KCLNSINGRIKLISLQKDLMCG TAGRCKTLTEQ |
| 4026 | 34394 | Α | 4067 | 1 | 2448 | |
| 4027 | 34395 | Α | 4068 | 1 | 2541 | |
| 4028 | 34396 | Α | 4069 | 1 | 828 | |
| 4029 | 34397 | Α | 4070 | 1 | 1899 | |
| 4030 | 34398 | В | 407I | 1 | 1686 | |
| 4031 | 34399 | Α | 4072 | 1 | 1437 | |

| SEQ ID NO: | SEQ ID NO: of peptide sequence | Met hod | SEQ ID NO: in USSN 09/540,217 | Nucleotide location of first codon for peptide sequence | Nucleotide location of last codon for last amino acid of peptide sequence | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide deletion, \-possible nucleotide insertion) |
|---------------|--------------------------------------|------------|-------------------------------------|--|---|--|
| 4032 | 34400 | Α | 4073 | 1 | 3417 | |
| 4033 | 34401 | À | 4074 | ī | 3826 | |
| 4034 | 34402 | A | 4075 | 812 | 2578 | FIRDFADFGTTIKQDFRLLGQTS VDRLLQLSQGQAVKGNQLLPV SLVKRKTTLAPNTQTASPRALA DSLMQLARQVSRLESGHSNGN GQVSPIFHQTSSSTIRSCSCHLLT LNFLTLOLNTSDIAVFHSTPKLL |
| | | | | | | LVTSTITHMGLNTSQAQSVPVI NSVAGSLAALQPVQFSQQLHSP HQQPLMQQSGSIHMAQQPFMA AVTQLONSHKFSHRSHGPQGS NDACSEPTINKKMRRNRFKWGP ASQQLVQAYDRQKNPSKEERE ALVEECNRVWQARRLGAFGKE DVHYSFAARGAKFRHGTILLG RRSSIPAPMVDSLJARVGVMA RGNAITLPVCGRDVKFTLEVLR GDSVEKTSRVWSGNERDQELL TEDALDDLIPSFLLTGQQTPAFG |
| | | | | · | | RKYSUVIEIADUSKRKAAALI ESDYRVLVGELDDEQMAALSR LGNDYRPTSAYERGQRYASRL QNEFAGNISALADAENISRKIIT RCINTAKLPKSVVALFSHPGELS ARSGDALQKAFTUKEELLKQQ ACKLHEQKKAGVGDNSIDSW KNAGRVFKDSDKFDANDPILK DOTOEWSGSATFTSDGKIRFIL |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nuclcotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 4035 | 34403 | A | 4076 | 1474 | 3367 | REEGANSECLGRHGFKKMLYV |
| | 1 | | | | 1 | KRDEVGKGOIRLETVFEQAIDO |
| | | l | | | | RFSTDTSLSTPAAPMVDSLIAR |
| | | i | | | | GVMARGNAITLPVCGRDVKFT |
| | | l | | | | LEVLRGDSVEKTSRVWSGNER |
| | i i | l | | 1 | | DQELLTEDALDDLIPSF\LLTGH |
| | | 1 | | | | KTPAFGQRVSGVIEIADGSRRR |
| | | 1 | | | | KAAALTESDYRVLVGELDDEO |
| | | | | | | MAALSRLGNDYRPTSAYERGO |
| i | 1 | 1 | | | | RYASRLQNEFAGNISALADAEN |
| i | | 1 | | | | ISRKIITRCINTAKLPKSVVALFS |
| | | l | | | | HPGE\LSARSGKCMVPTESAPH |
| | 1 | | | | | VTVLGCQCGPLGLENGLKEGY |
| | 1 | | | ŀ | | LGRSTLDMEAWQPLQEFYLHN |
| | | 1 | | | | LITGOMFEIAVTONNSKINSSSP |
| | 1 | ĺ | | | | TTEQSWMENDFDELTEVGFRR |
| 1 | | | | ŀ | | SVITNFSELKEHVLTHRKEAKN |
| | 1 | 1 | | | | LEKSDGENGTKLENTFODIIOE |
| | | | | ŀ | | NFPNLARQVNIQIQEIQKTPQRY |
| | 1 | | | ŀ | | SSRRATPGHIIVRFTKVEMKEK |
| | | | | | | VLRAAREKASLAPENLDNSKIR |
| | | | | | | PVVILFHYGESWNLLRADQRLI |
| | | | | | | FAKSWPRASRYQQGHQDLFILR |
| | | | İ | | | SDLPSQVFIRDKLMERRNRRTG |
| | i | | | | | RTEKARIWEVTDRTVRTWIGEA |
| | | | | | | VAAAAADGVTFSVPVTPHTFR |
| | | | | | | HSYAMHMLYAGIPLKVLQSLM |
| | | | | | | GHKSISSTEVYTKVFALDVAAR |
| | | | | 1 | | HRVQFAMPESDAVAMLKQLS |
| 4036 | 34404 | Α | 4077 | 794 | 4235 | RVSRGRKWFFIALKRMPAMKK |
| i | 1 | | | | | AMNLFLGLSNVRTVHPEGFTV |
| | | l | 1 | | | YISTHISFPSLSGYRTGLRSFGLV |
| | | | 1 | | | KQKKSPIRMPCVYTNTLCQYR |
| | | | | | | KPDGSGIVSLKIDWIIERYQLPQ |
| | l | 1 | | | | SYQRMPDFRRRFLQVCVNEINS |
| | | Į. | | | | RTPMRLSYIEKKKGRQTTHIDL |
| | | l | | | | ALKGLRVLLVEGNDPQGTASM |
| | | | | | | YHGWVPDLHIHAEDTLLPFYLG |
| | | 1 | | | | EKDDVTYAIKPTCWPGLDIIPSC |
| | | ŀ | l | | | LALHRIETELMGKFDEGKLPTD |
| | | 1 | | | | PHLMLRLAIETVA |
| 4037 | 34405 | Α | 4078 | 1 | 2574 | |
| 4038 | 34406 | Α | 4079 | I | 536 | |
| | | | | | | |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X-Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | eodon for last amino acid | *=Stop eodon, /=possible nucleofide |
| | sequence | l | 09/540,217 | | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 4039 | 34407 | A | 4080 | 368 | 1449 | LKSTNLITFLRLFVPOMPLAYM |
| | | | | | | KFTPSGLVAACAPWLRQRRVV |
| 1 | | | | | | QLGQIAFSAP/YLSQMVRQEMY |
| | | | | | | NRYGESAYEDGYRIYTTITRKV |
| | | | | | | QQAAQQAVRNNVLDYDMRHG |
| | | | | | | YRGPANVLWKVGESA WDNNK |
| | | | | | | ITDTLKALPTYGPLLPAAVTSA |
| | | | | l | l | NPQQATAMLADGSTVALSMEG |
| 1 | | | | | | VRWARPYRSDTQQGPTPRKVT |
| | | | | | | DVLQTGQQIWVRQVGDAWWL |
| | | | | | | AQVPEVNSALVSINPQNGAVM |
| | | 1 | i | | | ALALLNNARPWYLGAQPRDSTI |
| | l | | | | | IFCQFGAHPLLDPKTQPVGCRN |
| | | 1 | | | | AARKSCAEIRLVPDARANSGKL |
| | | | | | | VRRYRKYRRQYHKSKSRHQPL |
| | | | ĺ | | | RQQQPVRLDWRNVDNQYALT |
| | | | | | | TRFLYQSLQRHAQLNVPLFHVL |
| 4040 | 34408 | Λ | 4081 | 1420 | 1842 | |
| 4041 | 34409 | Α | 4082 | 407 | 1347 | GRIRVHIHKDGRADGGSQPGVT |
| | | | | | | AIQQQLPFAFAFPN*SY*TESAW |
| | | | | | | AQSIK\GPWWLRDQVDGPAGR |
| | į | | | | | LAALPQR/SLINAVSTRMEGISG |
| | | | | | | AFNTANPACST*FLCSLLILPSLF |
| | l | | | | | STALPNFRLSAMVSDCTISNMV |
| | | | | | | WST/SAVTDWSCTPLD*ERKHR |
| | | | | | | GTARLTTGKGVGMDRDKQVST |
| | | | | | | LFLGFCYAHLQWNEDVFIARH |
| | ĺ | | | | | VHLHIALFLDQRAQTASYLQYH |
| | | | | | | IFFARFVFPHRTGVFATVARLK |
| | | | | | | HNDNRTIAPCFTRLWTTLRWR |
| | | | | | | HLLFEVAFVVILQQRQQRVLHI |
| | ŀ | | | | | LCIGRIEVHHQTLFKPGDRRKG |
| | | | | | | KQLRFYVLL |
| 4042 | 34410 | Α | 4083 | 1 | 649 | MRHGYPARANVLVKVGESAW |
| | | l | | | | DNNKDYRYAKALPTYGPLLPA |
| | | | | | | AVTS/ANPQQATAMLADGSTV |
| | | | | | | A/LSMEGVRWARPYRSDT/QQG |
| | | | | | | PTPRKVTDVLQTGQ/QIWVRQV |
| l | | l | | l | | GDAWWLAQV/PEVNSALVSINP |
| 1 | 1 | l | | | | QNGAV/MALVGGFDFNQSKFN |
| | 1 | l | | | | RATQALRQAGAHLPAHSQSGH |
| | 1 | | | | | HQQTAR*KSNFCARM*TPDQLS |
| | | | | | , , | W**KNCPFRLSPT*QRQWSLRR |
| L | | | | L | | YRPVSQRTSF |

| SEQ ID NO: | SEQ ID NO: of peptide sequence | | SEQ ID NO: in USSN 09/540,217 | Nucleotide location of first codon for peptide sequence | Nucleotide location of last codon for last amino acid of peptide sequence | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
|---------------|--------------------------------------|--------|-------------------------------------|--|---|---|
| 4043 | 34411 | A | 4084 | 2 | 551 | WRAAGPEPCPTGRQLRP/AGDL ACSAAAGPGAEPFTAPLALAGR SKCGAAEPAPTQNSRWFMSPH LSLHASPQAEGAGSGL/VPAPR AAG*RAPQMRP/VVGAEAEE APGP*EPCRHPAPHASQHRYGC HPS/AAEPCRHPAPHASQHRYG CHPSGLNPAGTOHPMPASTGTA |
| | | | | | | AIHRG*TLPAPSSP |
| 4044 | 34412 | В | 4085 | 1 | 1029 | |
| 4045 | 34413 | Α | 4086 | 1 | 2157 | |
| 4046 | 34414 | A | 4087 | 1258 | 1838 | TQVVFITSAWGLGEMVVQGAV NPDEFYVHKPTLAANRPAINRR MGSKKIRMYV APTQEHGKQV KIEDVPQEQRDIFSLTNEEVQE LAQQAVQIEKHYGSPMDJIEW/ AKDG/HTGNGHVQALRNRCPE ARQHRNRIPGRILPRPIGRMAG PKTRIEHTSVTVISNRRKIK1EN RGHKGYEDRKLHEDLQLRHQS |
| 4047 | 34415 | Α | 4088 | 2806 | 3540 | |
| 4048 | 34416 | B A | 4089 4090 | 341 | 1251 | GLSSVGOSVNDHLPWT*GLSSV |
| 1019 | 34417 | | 4070 | 341 | | GGSVNDHLPWT*GLSSVGQSVNDHLPWT*GLSSVGQSINDHLP WA*VLSSVRQSIDDHLPWT*GL SSVRQSIDDHLPWT*GLSSVGQ SVDDHLPWT*GLSSVGQSIDDH LPWT*VLSSVRQSIDDHLPWT* GLSSVGQSVDDHLPMT*GLSSV RQ*VT*AKVNPKISAVTRNRGS VESPHLEGRSLKVQVFIPQVED MSWGPPWLWVEGESWT |
| 4050 | 34418 | A | 4091 | 426 | 706 | VLGGGSEEKAPLWWSGPMVLP GAHSMKT*LPHTHVEFGFACLA SAGAQDVGMEGPRHTTENSVT GSPSHFPPRASQHRRGICRPHAG RATADF |
| 4051 | 34419 | Α | 4092 | 596 | | GLSSVGQSIDDHLPWTVLSSV RQSIDDHLPWT*GLSSVGQSVD DHLPWT*GLSSVGQSVDDHLPWT*GLSSVG SUDDHLPWT*GLSSVG QSIDDHLPWT*GLSSVG QSIDDHLPWT*VLSSVRQSIDD HLPWT*VLSSVRQSIDD/HSSWD VRSV*CRTISR*PSSMDVRAV*C RTINR*PSSMDVRAV*C RTINR*PSSMDVRAV*C RTINR*PSSMDVRAV*C RTINR*PSSMDVRAV*CTRTSR*PST GLSMSLIPSQLCGLSAVTPFSAV TRNRGSYENHPILKAAASRSKSS FPRLKT |

| SEO ID | SEO ID NO: | Met | SEO ID NO: | Nucleotido | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| 110. | sequence | nou | 09/540,217 | codon for peptide | of peptide sequence | deletion, \-possible nucleotide insertion) |
| | , | | | sequence | | |
| 4052 | 34420 | A | 4093 | 3 | 1194 | SLGPRSHSCCRSDYRSGTTVPL |
| | | | | l | | VLLPVCGVPALLVFALLSPLCV |
| | | | | | l | VCSALCGGLLPVLRASLFLWCV |
| | i | | | l | 1 | AFLAGLVFVFGFAFFGSLVRGR |
| | Ì | | | | | FLVVVPFFLLFALCRLLFLVCW |
| | | | | l | i | LRSFGACPVSVCVAGFACFAGL |
| | | | | 1 | | FLVLVSLLSSGFGFRLSFSCVVG |
| | I | | | 1 | i . | SLCLPGFAFRAFCLFFLPCVGPA |
| | | | | | | LLAFPGFCGPSSPSLSYGGLFAP |
| | | | | İ | | WSCALLGFFGCLGWSAPGFLSS |
| | | | | | | FGLSVRVLSLPCASGLRSLSGC |
| | | | | i | | ALVPGLFLPWVFSPRSLRPLVSF |
| | | | | | | GCLLCSFVSH\NMDWIKES\AG |
| | l | | | | | KVIQGNP*WLPVILFFGSVPLTS |
| | ŀ | | | | | KAATAKPLMRMG\RALTVSQL |
| | | | | ŀ | | T/AVASFAAVYGLFILPT*PTLV |
| | l | i | | | | GAVQMDDTGTTRIGKLVSNHP |
| | | 1 | | | | FFIRVLLGVALTVCFGFVLGSF |
| 4053 | 34421 | С | 4094 | 70 | 1950 | |
| 4054 | 34422 | В | 4095 | 262 | 4347 | |
| 4055 | 34423 | Α | 4096 | 2 | 458 | 7935 |
| 4056 | 34424 | Α | 4097 | 2 | 445 | QPTERGLCASLKPSRAAIKSQSS |
| ł | | | | | | KVISFDSMSHIQGTVVQGVGSQ |
| | | ŀ | | | | GLEQQYRSGVAVFRLHSFSHRL |
| | | | | | | LSACEFSRCRVQAVSRSIILGSG |
| | 1 | ŀ | l | ŀ | | RWQPPSHSSTREWPSGHTVWG |
| | | ŀ | | 1 | | LQPHISPLHCPSKDSL*GLCLCN |
| | | ŀ | | | | KLPPENLGFSYVL. |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| 1 | sequence | 1 | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 4057 | 34425 | A | 4098 | li . | 2589 | MVWFLKNVNHGTHTNAKKYN |
| | | | | | | DVENKERTGWKWGSTEYLLCA |
| | 1 | | | | | RPLRKGNVGLSGDVFLTVFVM |
| | | | | | | KTGHSSSLLPSTTTSDSTAQEGY |
| | l | | | | 1 | ESRGGMLDWKHLLDSPDSTDP |
| | | | | | l | LGAVSSHNHODKKAMLKDGE |
| | 1 | | | | l | RPFNEPGVFHLLADHQLTQKV |
| | | 1 | | | | ASIPGSAVCAYDMLDIASVFTG |
| | | ı | | | | RFKEQKSPDSTWTPVPDERVPK |
| | | | | | | |
| | | | | | | PRPGCCAGSSSLERYATSNEFPE |
| | İ | | | | | DTLNFIKTHPLMDEAVPSIFNRP |
| | | 1 | | | | WFLRTMVRYRLTKIAVDTAAG |
| | | | | | | PYQNHTVVFLGSEKGIILKFLAF |
| | | | | | | IGNSGFLNDSLFLEEMSVYNSE |
| | 1 | | | | | KKWSTAKPVRVTIILNPGQASF |
| | | | | | | CITLRETV/C*RRKHIWCPPYRC |
| | | | | | | TLQ*HFCPCH\CLSGKETLCRVT |
| | | | | | | GGMKVKADRDESLPYAAMLA |
| | | 1 | | | | AQDMAQRCKELGITALHIKHR |
| 1 | | | | | | ATGGNRTKTPGPGA\SRPSSPCP |
| 1 | | | | | | LGCLK/WQTLFPRRRLRWPQGG |
| 1 | | | | | | RRKRSQLEAQRVIRESYLKGHD |
| İ | | | | | | QLVPVTLLAIAVILAFVMGAVF |
| | | | | | | SGITVYCVCDHRRKDVAVVQR |
| | | 1 | | | | KEKELTHSRRGSMSSVTKLSGL |
| 1 | | | | | | FGDTQSKDPKPEAILTPLMHNG |
| | | 1 | | | | KLATPGNTAKMLIKADQHHLD |
| | | 1 | | | | LTALPTPESTPTLQQKRKPSRGS |
| | | | | | | REWERNQNLINACTKDMPPMG |
| | ļ | 1 | | | | SPVIPTDLPLRASPSHIPSVVVLP |
| | | | | İ | | ITQQGYQHEYVDQPKMSEVAQ |
| i | | | | | | MALEDQAATLEYKTIKEHLSSK |
| 4058 | 34426 | В | 4099 | 1 | 1299 | |
| 4059 | 34427 | A | 4100 | 95 | 502 | FPEIPQSCREGAPGPAKPGGPRA |
| | | | | 1 | | REPCPNRTAASWGVHCEDGGS |
| | | | | | | TVRTGGPL*GRGVHREDGASSP |
| 1 | | | | | | QHPPRRGRGLGHLGPRPL*GQG |
| 1 | | | | | | DAAAAPGHRGKS/GGKGFLPAL |
| 1 | 1 | | | | | RVORGERGRVSRRAVCMWTSL |
| | | 1 | | | | CASVPS |
| 4060 | 34428 | A | 4101 | 2 | 653 | DSFGSMSVLIKNPRTLFGGKPY |
| 4000 | 34428 | ľ | 4101 | ľ | 055 | VCRECGRGFTWKSNLITHQRTH |
| 1 | İ | 1 | | | | SGEKPYVCKDCGRGFTWKSNL |
| | | | 1 | | | FTHORTHSGLKLYVCKECGOSF |
| 1 | | | | | | |
| | | | | | | SLKSNLITHQRAHTGEKPYVCR |
| | | | | | | ECGRGFRQHSHLVRHKRTHSG |
| | | | | | | EKPYICRECEQGFSQKSHLIRHL |
| | | | l | | | RTHTGEKPYVCTECGRHFSWK |
| | | | | | | SNLKTHQRTHSGVKPYVCLEC |
| L | l | | | | | GQCFSLKSNLNKHQ\RSHTGEK |

| SEQ ID NO; More SEQ ID NO; More SEQ ID NO; Nucleotide Sequence Sequ | le nucleotide leotide insertion) |
|--|-------------------------------------|
| | leotide insertion) |
| 4061 34429 A 4102 8 389 LPASASQSVGTTC CHFFFLLLLFFSSS FRVSLF*1QPLKT1 SGGYRASPERRAI P/YVCRECGRGFR YPHSFWTQDKKS | VISCENTONI |
| CHFFFLLLFFSSS FRYSLF*10PLKTI SGGYRASPERRAI P/YVCRECGRGFF YPHSFWTQDKRS | VISCENTONI |
| CHFFFLLLFFSSS FRYSLF*10PLKTI SGGYRASPERRAI PYYVCREGGRGF YPHSFWTQDKRS | |
| FRVSLF*1QPLKTI SGGYRASPERRAI P/YVCRECGRGFR YPHSFWTQDKS | |
| SGGYRASPERRAI PYYVCREGGRGFR YPHSFWTQDKRS | |
| P/YVCRECGRGFR YPHSFWTQDKRS | |
| YPHSFWTQDKRS | |
| | |
| 14002 14430 A 14103 1 140 ECKROICI KII KI | |
| RLCILKPLHHPTP | |
| PLPSHPCAPH/SAF | |
| L\P*SMALWARAC | |
| PAAPDASSPA/MP | |
| | |
| L/CPEPLGPSPAAF | |
| AARPPL/PPSPSAA | |
| PVGPSRGPG/PRN | |
| TAPMRCLPSVRPF | |
| PLPRPPSFVPSLPS | |
| TSAPPGSPRPGFV | RLPCLLFWGS |
| 4063 34431 B 4104 48 272 | |
| 4064 34432 A 4105 2 622 CPLSPLLFNIVLEI | LARAIRKEK |
| */LKGIQIGEEEVK | LSLFGDDLIV |
| YLENPKYSSKKLI | LELVNEFNKV |
| SGYKIYVHKSVA | LLYTNSDQAE |
| NOIKNSTPFTTAT | SSSSSSSSSP |
| QGIFLTKRLKNF* | RGKFKTLVK |
| KNOGDPKKGKNF | |
| NFGKTPFWAKKI* | |
| PPFFFQKLKKTGV | |
| KGFLSKK | |
| 4065 34433 A 4106 39 1043 QKQPVWQRCREI | GTLGYCGWK |
| WTLDIHGRGHRII | |
| WTEGFIOGRDVG | |
| ESIH*\GKSYEYEC | |
| RASLTNHOVIHTA | |
| GKVFSRNSHLVEI | |
| PYKCSECDKVFN | |
| | |
| RIHTGEKPHKCNI | |
| GLTTHLVIHTGEK | |
| NFRHKFSLTNHQI | |
| CNECGKVFSLLSY | |
| EKPYKCNECGRA | |
| HLLIHTGEKPYKC | |
| KF\NLTNHQRIHT | |
| CGKVFNQNPHLS | RHRKIHAGE |
| NSLRTLQME | |

| SEO ID | ISEO ID NO: | Met | SEO ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|-------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | eodon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 4066 | 34434 | A | 4107 | 3 | 941 | QQHQQQQHFVGQVAIQQQQQ |
| 4000 | 34434 | A | 4107 | ľ | 941 | QGPGVQTNQALGPKPQGLMPP |
| | | | | | | SSHQDLLVQQVSPRPPQGPQG |
| | | | | | | |
| | | 1 | | | | MVGPAQVGVLQIIQLHGALGP |
| | | 1 | | | | QGLH*QVFMP\QSRVFSSPQLA |
| l | | 1 | | | | QQGQGLMGHRLVTAQQQQQQ |
| | | 1 | | | | QQHQQQGSMAGLSHLQQSLMS |
| İ | | | | | | HSGQPKLSAQPMCSLLQLLQQ |
| | | 1 | | | | QQLLs*QQHLQQQQQQQLQQQ |
| | | 1 | | | | QQL*QPQLHQQQQQQQQLQQQQ |
| | | | | | | PQQL\QQQHQQLQQPQINSQ/HI |
| | | | | | | FPSRRPPNHMGLLTHSPNLTAS |
| | | | | | | LRLTSTHKAALGPGLQAALGH |
| | | | | İ | | KDGLLWKTLGTWRARGLICTG |
| | | _ | | | | GIISYFTQHSWEVKVFTTL |
| 4067 | 34435 | A | 4108 | 1 | 2255 | MEKNKVVKREAEANSINLSVY |
| | | 1 | | l | | EPFKVRKAEDKLKENSDNVLE |
| | 1 | | l | | NRVLDGKLSSEKNDTCLPGTAF | |
| | 1 | | | | SKTKSSSKLSSCSSAIMALSAKK | |
| | | | İ | | | AASDSCKEPVANSRESSPLPKE |
| | | 1 | | | | VNDSQARAPLQSTVMTNAVSP |
| | | ĺ | | | | AELTPKQVTIKPVATAFLPVSA |
| | | | 1 | | VNEMKTAGSRVINLKLANNTT | |
| | | 1 | | ŀ | | VKATVISAASVQSASSAIIKAAN |
| | | | | | | AIQQQTV VVPAPSRANAKLVPK |
| | | 1 | | | | TVHLANINLLPQGAQATSELRQ |
| | | | | | | VLTKAQQQIKQAIINAAASQPP |
| | | | | | | KKVSRVQVVSSLQSSVVEAFN |
| | | | | | | KVLSSVNPVPVYIPNLSPPTNAC |
| | | | | 1 | | ITLPTRGYKCLECGDSFAVEKS |
| l | | | | ı | | LTQHYDRQSMRIEVTCNHGTK |
| | | | | | | NLIFYNKCSLLSHARGHKEKGV |
| 1 | | 1 | | | | AADTRGQKTCTICQMLLPNQCS |
| | | i | | | | YASHQRIHQHKSLYTCPECGAI |
| | | 1 | | | | CRSVHFQTHVTKNCLHYMRRV |
| | | 1 | | 1 | | GFRCVHCNVVYSDVAALQSHI |
| | | 1 | | l | | QGSHCEVFYKCPICPMACKSAP |
| 1 | | | | 1 | | STHSHTYTQHPGIKIGEPEIIYKO |
| 1 | 1 | 1 | | | | SMCDTVFTLQTLLYRHFDQHIE |
| | | | | 1 | | NOKLSVFKCPDCYLLYAQKOL |
| | 1 | 1 | | | | MMDHIKSMHGTLKSIEGPPNLG |
| 1 | | | | | | INLPLSIKPATONSANONKEDT |
| | | 1 | | | , | KSMNGKEKLEKKSPSPVKKSV |
| | | | | | 1 | ETKKVASPGWTCWECDRLFIQ |
| | 1 | 1 | | 1 | 1 | RDVYISHVRKEOGKOMKKHPC |
| | | 1 | | 1 | 1 | RHLCOHNRIKHKGIRKVYACSH |
| | | 1 | | 1 | 1 | CPDSRRTFTKRLMLEKHVQLM |
| 4068 | 34436 | В | 4109 | 1 | 411 | S. S. S. S. S. S. S. S. S. S. S. S. S. S |
| 4068 | 34436 | C | 4110 | 54 | 146 | |
| 4069 | 34438 | A | 4111 | 1 | 1937 | |
| 4070 | 124430 | Ι^ | Latt. | J' | 1737 | L |

| SEQ ID | SEQ ID NO: | | SEQ ID NO: | | | Amino acid sequence (X-Unknown, |
|--------|----------------|--------|------------|-------------------------------|---------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | | | |
| 4071 | 34439 | Α | 4112 | 1 | 1830 | MCIEVTCNHCTKNLIVYNKCNI |
| | | | | | | LSQARGHKEKGVVMQCSYSIL |
| ŀ | 1 | | l | ľ | | KPVSAGHIIVSPSSNSSSSSSTLQ |
| | 1 | | 1 | | | SPVGTGIHTVTKIQSGITGTVISA |
| | | | | | | PSSTPSTTAMPLDEDPSKLCRH |
| | | | | | | NLKCLKCNEIFQDKRSLATHFQ |
| | | | | | | QAADMSGQKTCTICQMLLPNQ/ |
| | | | | | | CQRIHQHKSPYTCPECRAICRK |
| | 1 | | | | | KRT\QIHEWERETGKEISISFEKK |
| | | | | | | SMETKKVASPGWTCWECDHLF |
| 1 | | | | | | MQRDVYISHLRKEHGKQMKK |
| | | | | l | | HPCRQCDKPFSSSHRLCWHNRI |
| 1 | | | | | 1 | KHKGIRKVYACSHCPDSTGTFT |
| 1 | | | | | | KGLMLEKHV\H*CMASRTLT*K |
| 1 | | 1 | | | 1 | K*QTPPMRRKQK*K*TSRSAVP |
| | | | | 1 | l | SG\VERTGSGVQASQRSNNSTT |
| | | | | 1 | | EKAENQCF*GSQAPLCCTQVKG |
| | | | | | | TSASAQAKWGWRR*PTGEQTQ |
| | | | | | | PRGRISQW\VMSDRKCKVCAKT |
| 1 | | i i | | 1 | l . | FETKAALNTHMQTHGHAEGCL |
| l | | [| | | l | KQPCRSLLSQPRIKTEARNLIRN |
| | | | | | | ADFLNSILRNGEGYSKEKKNGT |
| ĺ | | 1 1 | | | | GFLGRSARLALGAQGGKSWRF |
| | | 1 | | | | LFWVLLPNVLVLRVGMHDVN |
| | | | | | HRLINAAGCVSQLAVTLSTEPH | |
| | | 1 | | | | GISSAISRVPRHCHPSGENSMAT |
| 1 | | | | | | SLNVNRSISRLAAGSGVLAMDL |
| | | | | | | PIPAGHRAIETGLLGTEDTEQ |
| 4072 | 34440 34441 | C | 4113 | 217 | 281 | |
| 4074 | 34441 | A | 4114 | I I | 675 | |
| 4074 | 34442 | A C | 4116 | 126 | 434 | |
| 4076 | 34444 | A | 4117 | 804 | 2061 | WERREAGGEDEGINIHEP*VEE |
| 4076 | 34444 | ^ | 4117 | 804 | 2001 | EMKKHESNNVGLLENLTNGVT |
| l | 1 | | İ | 1 | | |
| | | 1 | | | | AGNGDNGLIPQRKSRTPENQQF PDNESEEYHSLGDKSKTSFQNS |
| | | | | | | |
| | 1 | | | | | NNNNNKQQEQQQQNPTFSNTR |
| | 1 | | | | | KLTKLYKAPIPPSIILSGCPNIND |
| | | | | | | SNWQEIEHGMQTAGLPTRPLSH |
| | | | | | | GLQQKGAAFRCLGCKCSEPFTG |
| | | 1 | | | | SLILQKAKTNTQKWQATYPKS |
| | | 1 | | | | QNEQLVPSVGKSYRCSTPAQP |
| | 1 | 1 | | | | MKTAVGHKPCKATGAELPKAL |
| | | 1 | | 1 | | GAQPLHPCALDVGQGFKKGNF |
| 1 | | 1 | | 1 | GAVGLNGLLGLEFHGVSGVLL | |
| 1 | | | | | VGPGDGGLISEGVVREDLMCG | |
| 1 | | 1 | | | VWSAGTWSVGTAERCLEKPGA | |
| | | 1 | 1 | | 1 | LHVIEGPLDSWDGPVMPNGPV |
| | I | 1 | | | 1 | KSRQSSCLDGPGRCCSEILTGQS |
| 1 | | 1 | | | | HGNKKPARASSKSSQSINDRPL |
| l | 1 | 1 | 1 | | | AVLTNQYQCEQLASERQPSSNS |

| SEQID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|-------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 4077 | 34445 | A | 4118 | 1 | 357 | GKLMLPGSTRKPQVPVDRKMG |
| | 1 | | | | | HEGVFVWQAGLRARPGPSLPFS |
| | | | | | | HGLTLHLH WPLALPV/GATSSP |
| | | | | | | CEAGDLGV\PLAAGTWCPWEA |
| | | | | | | *RQEEAGWQAPGRAGPARVG |
| | | | | | | WGGTGLTSAEVIITI |
| 4078 | 34446 | A | 4119 | 1 | 771 | MLISHKQLSPQLLSLTLPLSEGK |
| | 1 | | | | | AGWAGECPNPPSKDSPVQGIG/ |
| | İ | | | | | GPPP/GYQKCR*DTASMLTMAP |
| | | | | | | CHGPVCPPHPGWRPRSGSRVIL |
| | İ | | | | | PAPPGHHPWP\GPRARNGLGTF |
| | | | | | | QGCSTGWQVQETCFGPGGWLG |
| | | | | | | DRHLVGPAATGARCLPAARGP/ |
| l | l | | | | | DGALHPAVPTGKLKGQP\GPGA |
| l | | | | | | RHORTYD*LPRPCGAAGLGSPP |
| | - | | | | | A*HPISEETENOWGLHGPPOPA |
| | | | | l | | WARPDHGCQ/APTLSPSLKRKP |
| | | l | | ŀ | | GRVTAGGPMPGCFSTSSVPTT |
| 4079 | 34447 | A | 4120 | 1 | 402 | MLISHKQLSPQLLSLTLPLSEGK |
| | | | | | | AGWAGECPNPPSKDSPVOGIGD |
| | l | | | l | | LHQLPKMQIRYSIHADDGSVPR |
| 1 | ŀ | | | | | AAHKRGLRKRTLKTISLPROES |
| ĺ | | 1 | | l | | AFPFHGQGGDPGVVPGSSFLHP |
| | | 1 | | | | LGTTPGOGPRARNGLG\PSRAA |
| 1 | 1 | l | | | | PPAGRGVAGGSPSGG\PAATGA |
| 1 | | l | | l | | RCLPAARGPVGPYTQOSORAS* |
| | ŀ | l | | | | KGSLGPGARHORTYD*LPRPCG |
| | l . | l | | l | | AAGLGSPPA*HPISEETENQWG |
| | l | 1 | | | } | LHGPPOPA WARPDHGROPLRC |
| | l | 1 | | | | HPP*RGSQGGPQKAAVSQQIPR |
| | | 1 | | İ | | AGQEGTH*DPTEWGPPDGDQG |
| | | 1 | | | | GPRESCRGLQGGRGQCLCDWS |
| | | i | | | | PNTSEI*YPHA*NGD*KAG\PPM |
| | | l | | | | DTKSQLQVSTPKSPASHGEDVA |
| | | l | | Ì | | RLEEPEASGD/RSVP\GLPGASLI |
| | | l | | | | PIWRPPFSRISVRTFLPSPWNLL |
| | 1 | ı | | | | RDCGFLGTSLASSSGRVTA |
| 4080 | 34448 | c | 4121 | 111 | 218 | |
| 4081 | 34449 | Ā | 4122 | 2 | 453 | WWPVLSVPPECRLPGRLPSG*V |
| | 1 | | | I | | RGPAPWWPEPASQDKSQLSSR |
| | 1 | I | | i | 1 | GFPGKVSLGKGMAFSPLQTAP* |
| | 1 | I | | I | | KWLGLSPPLSSTENTASRGHTS |
| | 1 | 1 | | l | | PSSRNGFDSQPRDSRTGRECQA |
| | 1 | 1 | | l | | TOLPAOHSHAEVLHFGGAMSG |
| | 1 | 1 | | l | | OLSLVGPODSKRTARLTDSO |
| | <u> </u> | | L | | | Queb. or Questic little 190Q |

| SEO ID | SEO ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Antino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | eodon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 4082 | 34450 | A | 4123 | 1146 | 1775 | KGWLEGAPEA*ERYPG\PPCVV |
| | | | | | | CSLSDAPWVGHPAPSLGV*EP |
| | , | | Į. | | | NPP*SRGESOGPTSSICRQSSGD |
| | | | | | | LG*KLESPIHTVIPRHTSQARQG |
| | | | | | | HTAPFPPFQVPS*LLV*LKAVSL |
| | | | | | | APAEAP*PASGLHAPWPVAPRV |
| ŀ | | | | | | TCAI/PAKGTTVPAGPAELRPVS |
| 1 | | | | | | PPPILLP/PDSRSSAFPSRKGPASE |
| | | | | | | YETCSPPTS*/EVPS*TYKSMGP |
| | | | | | | GIRLPALPASPRVPSEGPGLSEH |
| | İ | | | | | PEGPPALPPAIPFS\SPSWFKQCS |
| | | | | | | FSIRPGWLLHGAPQGKGWPQA |
| | | 1 | | | | SWVGKTG*PEKRGSPRGPEHSA |
| | | 1 | | i | | LNLRVALPGVAV*EGPACVGW |
| | | 1 | | | | GGPPQPPGAICEATAPPSI/VPPL |
| | ŀ | 1 | | 1 | | SLPAPFPGTLP/PPTPAASP/PPAL |
| | | | | | | PPLLRRGRPRPCAALALPALSSI |
| | ı | | | | FS/PPVFSLLSLQLPADRVRQVH | |
| | | i | | | | PVLRAPGPPFRPPKQIPPSSSGDL |
| | 1 | | | | PFPSLPGR/PVL*LEKWLPPAPK | |
| | I | | | | ASPPSSVNLILLVVVKLNTFRCC | |
| | 1 | | | | PLVKNLVPPSVVCPCPCSYKYL | |
| | 1 1 | 1 | | | | *ILIYIHTLHMGQPPSPSSAGNQ |
| | | 1 | | | | SLCYPCGGLVAQPTKRTLVPPT |
| | | ļ. | | | | OLOSVPPPV/KPPCHARPVDSOP |
| l | | | | | | PPSLPPPTKHGGAVQAAVWPDS |
| | | | | | | FYPVLLSLG |
| 4083 | 34451 | Α | 4124 | 146 | 1701 | TFLGYLETAHGPSAQQCPTGLF |
| | ŀ | 1 | | | | AFRSLGRGLLLTSLPKQPARSPP |
| | | 1 | | | | REDVPRSTTQEMTRPRHPPRKP |
| | | 1 | | | | AQPGLGARRRGAPV/RGLSKSR |
| | | 1 | | | | ELNSGNTSDSGNSFT\PPHPRTR |
| | | 1 | | | | GPCWRISPPPAGAESQGDAMLL |
| 1 | | 1 | | | | ARMCQMPSLGLMSRTFPHSST |
| l | 1 | 1 | | | | GKARGFQSPCLECAEVKKSSLV |
| | | 1 | | | | PSTARSSPMKGCSRSSSYASTRS |
| | | 1 | | | | SSHSSQSPNPRASPRVRTIITCIL |
| | İ | 1 | | | | *TRKRPRETKSSAKVT\HYYSSK |
| | | 1 | | | | SGKRSPPSRSSRSRRSPSYSRYS |
| | | 1 | | | | PSSPNSPADIPQNSHPQPSASTD |
| | | 1 | | | | RPHIQSPQFLPTHQGLRNIHVLT |
| | | | | | | PAAPALL*CPPANADTPAQAQP |
| | | 1 | | | | PPLRY*QPSQTLTAAPSSSLRSP |
| | | 1 | | | | LRQRADPIP*PSGGAGSQIQ\WK |
| | | 1 | 1 | | | DSQORERERARRRRRSYSPMR |
| | | 1 | | | | KRRRDSPSHLEARRITSARKRPI |
| | | 1 | | | | PYYRPSPSSSGSLSSTSSWYSSSS |
| 1 | 1 | 1 | | | | SRSASRSYSRSRSRSRSRRRSRT |
| | 1 | 1 | | | | RTSSSSSSRSPSPGSRSRSRSRSR |
| [| 1 | 1 | 1 | | | SRSRSRSQSRSYSSADSYSSTRR |
| | | | | | L | DICHOLOGO CON TOOM DO 1331 KK |

| SEO ID | SEO ID NO: | Met | SEO ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | 1 | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | . (| | | sequence | | |
| 4084 | 34452 | ĪA. | 4125 | li . | 1068 | MLLLELNAPEHVLETINFQTLT |
| 17007 | 31132 | ľ. | 1 | ľ | | AFCNTFHILRPTKAPGFVYAWL |
| | | | | İ | | ELISHRIFIARMLAHTPQQKGW |
| | | ľ | | | | PMYAQLLIDLFKYLAPFLRNVE |
| | | ŀ | | l | | LTKPMOILYKGTLRVLLVLLHE |
| İ | | | | | | FPEFLCDYHYGFCDVIPPNCIQL |
| | | ı | | | | RNLILSAFPRNMRLPDPFTPNLK |
| | | | | | | VDMLSEINIAPRILTNFTGVMPP |
| 1 | Ì | | | | | OFKKDLDSYLKTRSPVTFLSDL |
| 1 | | | | | | RSN\LQVSNEPGNRYNLQLINA |
| 1 | | l | | | | |
| | | | | | | LVLYVGTQAIAHIHNKGSTPSM |
| | | 1 | | | | STITHSAHMDIFQNLAVDLDTE |
| | | ĺ | | | | GRYLFLNAIANQ\LRYPNSHTH |
| | | 1 | | | | YFSCTML\YLFGRRANSGRPFQ\ |
| | | 1 | | | | EQITRVLLERLIVNRPHPWGLLI |
| L | | 1 | | | | TFIELIKNPAFKFWNHEFVHCAI |
| 4085 | 34453 | Α | 4126 |]1 | 984 | MQANLEMAGNGVTSMGMEPL |
| | | 1 | | | | AIPHIYCCSEGTCNFSNTENHCL |
| 1 | | | | | | RAALSMLLNGTPFAFVIDLAAL |
| 1 | | | | | | ASRREYLKLDKWLTDKIREHGI |
| | | | | | | SVHGLFPSRVLSPALGPGAFPG |
| | | | | | | RHNCGSCVAPQSGLPGVHPVEL |
| ľ | | | | | | PWSISKLFRLRSPANFSDVLGSR |
| | | | | | | SKVLLLMCTLKYCGMQLGADA |
| | 1 | | | | | TRVDMLTFLPTLGFIRNNDYTD |
| | | | | l | | DTKASELTELSHNLHAYDSVTC |
| | | | | | | VPGDETECSKTVSTWAYTAESL |
| İ | | | | | | QGYMAAKLLGRNLTVPSRYLF |
| | | | | | | LNAIANQLRYPNSHTHYFSCTM |
| ł | | | | | | LYLFAEANTEAIQEQIT/RLVRE |
| | | | | | | RI*S*ANAYWHSEKFYQFTCEL |
| 4086 | 34454 | С | 4127 | 1 | 399 | |
| 4087 | 34455 | Α | 4128 | ı | 868 | MANVCNPSTLGGRGGRITRRPE |
| | | | | | | DPGSPVYSVPPASYHPKPWLGA |
| | | 1 | | | | QPATVVTPGVNVTLRCRAPQP |
| | | | | | | AWRFGLFKPGEIAPLLFRDVSS |
| | | | | | | ELAEFFLEEVTPAQGGIYRCCY |
| 1 | | | | | | RRPDWGPGVWSQPSDVLELLV |
| ŀ | | 1 | | | | TEELPRPSLVALPGPVVGPGAN |
| ŀ | | | | | | VSLRCAGRLRNMSFVLYREGV |
| | | 1 | 1 | | | AAPLQYRHSAQPWADFTLLGA |
| | - | 1 | l | | | RAPGTYSCYYHTPSAPYVLSQR |
| | | 1 | | 1 | | SEVLVISWE\TLAPPTTPGGT*S |
| | | 1 | | ŀ | | AWGWPGWSSSPWARWSLLTG |
| | | 1 | 1 | | | AVRTALLLFPQVPHRATTPWV1 |
| L | | | | | | SYDWVWLP |
| 4088 | 34456 | Α | 4129 | 1 | 270 | |
| 4089 | 34457 | В | 4130 | 39 | 919 | |

| SEQ ID | SEQ ID NO: | | SEQ ID NO: | | | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------------------|---------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nuclcotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | l | sequence | | |
| 4090 | 34458 | Α | 4131 | 3 | 466 | GRALCPPRLLAAGRVLGPGRRS |
| | | | | | | PG\PGPGVP/GG*R*GGAEPRPG |
| | | | | | | APRGRVLPPSAGSGQFSAATPA |
| l | | | | | l | QNGLPALRGPGSRPGIRSKAVR |
| | | l | | ļ | | PVPLGRVGVYFRDALRASGQS |
| | | | | 1 | | GRKLCCIGNTLSPTSFSVGKEVP |
| 1 | | l | | | | RKHETNOKHEKGILCMEAVKP |
| 4091 | 34459 | Α | 4132 | 1 | 1647 | MWRWLYAGARMTVRDKQPLE |
| | | | | 1 | | QMLAGCTHASLVPTQLWRLLV |
| | | | | Ì | | NRSSVSLKAVLLGGAAIPVELT |
| | | | | | | EQARDMGIRCFCGYGLTEFAST |
| | 1 | 1 | | | | VCAKEADGLADVGSPLPGREV |
| | 1 | | | | | KIVNNEVWLRAASMAEGYWR |
| | | 1 | | | | NGOLVSLVNDEGWYATRDRRE |
| | 1 | 1 | | | | MHNGKLTIVGRLDNLFFSGGEG |
| 1 | | | | | | IQPEEVERVIAAHPAVLQVFIVP |
| | | 1 | | | | VADKEFCHRPVAVMEYDHESV |
| | | | | } | | DLSEWVKDKLARFQHLVRWLT |
| | ŀ | | | ł | 1 | LPAEPKNGGIKFHVSAKRVGAL |
| | į. | l | | l | | TTRMEAAQQHADDKIRQMINS |
| | | | | | | EQRLSEQFENLANRIFEHSNRR |
| | ŀ | | | | 1 | VDEONROSLNSLLSPLREOLDG |
| | | l | | | | FRROFRTASLMKVAGWDYLM |
| | į . | | | ļ | | NSLYNANSSALVNRVRYKWIA |
| | | l | | | | AFEGGFTGIVATLDTGRPGPVM |
| | ŀ | | | | | AFRVDMDALDLSEEODVSHRP |
| | | l | | | | YRDGFASCNAGMMHACGHDG |
| | ŀ | | | i | | HTAIGLGLAHTLKOFESGLHGV |
| | | | | | | IKLIFQPAEE\VRVARGRWSMQ |
| | | | İ | | | VS*MMLIILLPCTLALAYLRALL |
| | i | | l | l | | CAAVIILWOPPNLTRTSPVPPLT |
| | 1 | | | l | | OAQNOKTVTMPCWRHTSHSCT |
| | | | | | | ACNRPAORRSFOS |
| 4092 | 34460 | A | 4133 | 864 | 1128 | TGRSTIRRORREPRRKAATLRF |
| | | | | | | DRNGCRARCTPP\GRKEORYOO |
| | | l | | l | 1 | TADGDKGAEFYRRPEGVEIVA |
| | | | | 1 | | VMEORDEVIOADKLAGETKRI |
| | | | | l | | DAL |
| 4093 | 34461 | A | 4134 | 618 | 1102 - | HSNAAPTARSSFVONTPSSCGY |
| | | 1 | | l | | SRRAWRISSIPEETDRTSYRNIQ |
| 1 | 1 | 1 | | ŀ | | CGNHPPVPARLPAGQTGDGDIP |
| 1 | | l | | ŀ | | PRPRWQSPQTAPRKPPDLP/LIR |
| 1 | | | | [| | KNKIPMFRSATTOPGLTGTIAK |
| | | | | ŀ | | ASSSEVKAIIGARVKMTRSENF |
| l | | 1 | | 1 | | GIOSSLKNILIMSATSWSEPPOP |
| | | 1 | | ĺ | | TRLGP |
| L | L | | | L | L | |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------------------|---------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \-possible nucleotide insertion) |
| 4094 | 34462 | A | 4135 | 2400 | 3201 | VGGGRNRSPGVACWVEDGNG |
| | | | | | | DAVRDGW\ALDADWQASQAM |
| | | | | | | RRKQOPE\YWQHDAATADADR |
| | | | | l . | | QMNMPV\LH\RALVAGRAQEM |
| | | | | l | | NGAQGKTLLKGW\DEASARRG |
| | | | | 1 | | T\KTED\FCEEDTRDDAMIAWM |
| | | l | | l | | PR*PGVLPRADAWANVLNHGV |
| | | | | ļ. | | GWKKAQLK\STWM\PQVQQ*W |
| | | l | | l | | RGD\KAANSNAAVAHTVVLLN |
| | | | | l | | SGGDATQ/TAAFPISSPLSV/EEV |
| | | | | | | CVTMVIA*FWMWDSGSGGVVL |
| | | 1 | | ĺ | | CSSSGRSLTSWSATKVRG/SGH |
| | | 1 | | i | | KGRWCSRQGVTCQVRHGGHV |
| | | 1 | | | | APH |
| 4095 | 34463 | Α | 4136 | 118 | 1008 | |
| 4096 | 34464 | A | 4137 | 3 | 1140 | KHTYMLSILKPVRTSALPPPAP |
| | | | | ĺ | | AQTLCTQLSRVSSRLL*DHPSR |
| | | | | | | WGLR/PSTGMSQARACSPGSLG |
| | 1 | | | | | WMQRSSFTPGAGRVRHIPN\SA |
| l | | | | l | | GSTRRPACGSRSAAAPVRPCRR |
| | | | | | | TR*G/RSSVVERFMTALSLACR |
| | | | İ | | | ALPGP*AAPGPSITRRFTISAELK |
| | | | | | | DTRL/PREHVVPLVCTHAIAVPD |
| | | 1 | | | | RGAAVRPTRRRDAAAPPSPLVG |
| | | 1 | | | | DVTLQCPSQ*RG\$NAPDQVRLP |
| | | | | l | | CVG*RPRSSLQRSGLSVFSADGS |
| l | | 1 | | | | TSGPEPASGRKDAGWPARVLRF |
| | i | | | l | | GTLSRGAPEAGADWGPYSPGSP |
| | | | | | | GAAASGAPWLGQPQALQGAG |
| | | | | | | GQLVGSENGERGTGTKPRVSVS |
| | l . | 1 | | | | VAYGEIALPADTSWSSRAGAA |
| | 1 | l | | l | | VLLGLSRSTGGEGPGNMGHGG |
| | | _ | | | | QSQMLTLEVL |
| 4097 | 34465 | Α | 4138 | 10 | 585 | PLEMELNLISIEVWGERLGISTG |
| | | 1 | | 1 | | TEKMPTLKHRTWPVECSKASSL |
| | 1 | 1 | | I | | EGDLRSL/S*LEVISAFSADPASA |
| 1 | | | | l | | DDSPGCWKKKDDCSMVHLHR |
| l | 1 | | 1 | İ | | QEWQQQQCCQ*K*RKQPPGER |
| 1 | 1 | | 1 | I | | RNKCGSHPVCGTVLWQP*QTH\ |
| | 1 | | 1 | | | QISSCPTVGCPPSHSSFSILDGAN |
| l | 1 | 1 | 1 | 1 | 1 | AGQEKQSTTEPEPALFLLPPSRG |
| | L | | L | | | AFGPFGLLSDLRRQL |
| 4098 | 34466 | Α | 4139 | 1 | 474 | |
| 4099 | 34467 | Α | 4140 | 458 | 612 | ASCMASVDISVLTCMWRCTIEQ |
| | | | 1 | I | | SSSFLCLLTPLWE*SWCHVTRIC |
| | | | | | | PFISLG |

| SEQ ID | | | SEQ ID NO: | | | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------------------|---------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \-possible nucleotide insertion) |
| 4100 | 34468 | Α | 4141 | I | 829 | MGRPDLILSSILGLRWLLLPQSS |
| | | | | | | RAGRRGAIREASDAEQVTFSGG |
| | | 1 | | | | TVPARTSSGREWRSLLGPDMET |
| | 1 | 1 | | | | TSLFCIDTKTTFLFVYRYGDHIP |
| | 1 | 1 | | | | LVPEQSGLEPLLIWADPGLFHV |
| | i | 1 | | | | RLFHLLTIDDNFCGLDMNAPLG |
| | | 1 | | | | VSDMVRGIPVFTEDRDRMTSVI |
| | | 1 | | | | AYVYKNHSLAFVGTKSGKLKK |
| | | | | | | /VRSSAAP*VWDQDTPRSLGQQ |
| | | | | l | | GAQRQP/ILRQCVYTFFQLN*RC |
| | | 1 | | | | PHSTARRELRTGGFIPTRSHQD |
| | | 1 | | | | GLRSAARCTQGTTQ*ASWSCV |
| | | 1 | | l | | HVCASVRAMCSYC |
| 4101 | 34469 | Α | 4142 | 5 | 237 | NFGAMTRIR\DLPWEINPLSSCS |
| | | | | l | | SLCEKDPPTTSSPQTN*PKEHHT |
| | | 1 | | l | | NFQSETGDEFYPWTQNFSTGHG |
| | | Į . | | | | LGKTVFPWCL |
| 4102 | 34470 | A | 4143 | 1125 | 1190 | |
| 4103 | 34471 | Α | 4144 | 306 | 573 | RNFGAMTRIR\DLPWEINPLSSC |
| | ŀ | | | | | SLLREKDPPTTSGPQTNQPKKH |
| | | | | | | LTNFKSGKRPLLTLFSNLSHCPS |
| | | | | | | TTFFFPFFNLSLLLISIPFIFW |
| 4104 | 34472 | Α | 4145 | I | 329 | ASHSWQTLQHSGRYSRSSG/SA |
| | | | | | | GSPRDCAARAPTISPGCAMAWL |
| | | 1 | | | | NLDSISPSSQSKASPLSQLTCPET |
| | 1 | | | | | SYTGCP*SAPHSPPPPWCPQERC |
| | | L | | | | ACKGHCLHHRDGCCGYGYN |
| 4105 | 34473 | A | 4146 | 2 | 336 | SILTRKCKYGMEIPT/NIPGLGA |
| | | l | | | | AGPTGMFFGSAPSPMGGISPAM |
| | į. | l | | 1 | | TPWNQGATPAYGAWSPSVGSG |
| l | | | | 1 | | MTPGAAGFSPPKA/PTYSPTSPG |
| | | | | | | YSPTSPTYSLTSPAISPDDSDEE |
| 4106 | 34474 | В | 4147 | 1 | 1260 | |
| 4107 | 34475 | Α | 4148 | 150 | 335 | SFQQSAPW*ASGQSCASDPAPP |
| | | 1 | | l | | ATARGRFGPHQSQAFHSRHSPIP |
| | | | | | | DPLPPPCSGGWGHSRW |
| 4108 | 34476 | В | 4149 | 1 | 3267 | |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|----------------|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 4109 | 34477 | - | 4150 | 1528 | 2973 | CVOVES UPCHDICIPATION |
| 4109 | 34477 | Α | 4130 | 1328 | 29/3 | GKQIFSLIIPGHINCIRTHSTHPD |
| | | 1 | | | | DEDSGPYKHISPGDTKTVINNW |
| | ŀ | 1 | | | 1 | LLIEGHTIGIGDSIADSKTYQDIQ |
| | | 1 | | | | NTIKKAKQDVIEVIEKAHNNEL |
| | | 1 | | | ļ | EPTPGNTLRQTFENQVIAVVGQ |
| | | ı | | | | QNVEGKRIP*LPPPL*WGAGRR |
| | | l | | l | | EGVG*CGRFSEHSRSSAAGYRG |
| | | | | | | GRPCC\PSWEDDP/GAPPDPPAS |
| | | 1 | | ŀ | | AQIPAPTRSGCVRCSARPSPGPP |
| 1 | | | | İ | | AECAAGPSHWYNQSGTSSQKP |
| | | | | | | CWKA*AYPGSGTQRSRGSQAR |
| | | | | | | SHP**SEAESGA*SQMESACPRR |
| | | 1 | | | | SAVQRQQ*PDSQTSAAECSLG |
| | | 1 | | | | WAPAHCCVPSR*PLLRPAWPS* |
| | | 1 | | | ŀ | *CSECPGKS*NQQWSPQCQ*YD |
| | Į. | | | | | PNPQSTVVAEDQEWVNVYYE |
| | | 1 | | | | MPDFDVARISPWLLRVELDRK |
| | | 1 | | | | HMTDRKLTMEQIAEKINAGFG |
| | | l | | | | DDLNCIFNDDNAEKLVLRIRIM |
| | | | | | | NSDENKMQEVMGVLEVSVSHV |
| 4110 | 34478 | Α | 4151 | 459 | 940 | HLPGGGVPGREGGSPDQHVAP |
| | | l | ł | | | GAVSGGAGGGSTRGRGSRRRR |
| | | l | | | | PGRPRPGPRQPRRGALPGGEHG |
| 1 | | | | | | LRASARCAARAQQRDPG/TPSC |
| | | | | | | SSWACPTPRRPWAPAASSRLRR |
| | | l | | | | PPRGPACATPPPCRPPARRTCTG |
| l | | | | | | RCPPSCCLCGSPTTWRRPPPTG |
| | | | | | | GALESPKRR |
| 4111 | 34479 | Α | 4152 | 264 | 1386 | SSRCQPVCESGHPGYGQSPA/YT |
| | | 1 | | | | TAGRTESGGTGST/GDNHPLWP |
| | | | | | | CI/GGAPCPAQNTPHLRCV*RSH |
| l | | | | | | ALALDSAGSSSPESPH*RASIPH |
| 1 | | | i | 1 | | TTLGQKRRSWAGTAHS\PMAPC |
| | | | | | | AAASISTST*LSHHHSPAAQSVC |
| | | | | | | PSSHTTPSFCPIQKFHCFR/SPQR |
| l | | | | | | NTS*VVLCPGG*LRVG*WPSSG |
| | | | | | | HDRSWYHTREPSVGN*HRSHQ |
| | | | | | | RR*RGTAPAPGPSARLOCPARG |
| ľ | | | | | | SRSSHSAPASSSRRPFPGSTPAG |
| ľ | | | | | | LGFPSARFPVGKPVVPAALMNR |
| 1 | | | | | | PTRGERRFAYWAPGWFFFSPVR |
| | | l | 1 | | | RATADCPSP/SWP*ESCSKRSTL |
| | | l | | | | VCPSRRKSCLMVVPKSAKSPVL |
| l | | | | | _ | AK/YGPVGHDHGTEHDVVLGE |
| | Į. | | | | | VQGKRPVAPTMGTPKHKAVHP |
| | 1 | | | | | RAPH |
| 4112 | 34480 | В | 4153 | 52 | 363 | |
| C-112 | 2-1400 | | | | J0J | |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nueleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|----------|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop eodon, /=possible nucleotide |
| | sequence | 1 | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | 1 | sequence | | |
| 4113 | 34481 | A | 4154 | 321 | 802 | HLPGGGVPGREGGSPDOHVAP |
| | | | | | | GAVSGGAGGGSTRGRGSRRRR |
| | | | | I | | PGRPRPGPRQPRRGALPGGEHG |
| l | | | | l | | LRASARCAARAOORDPG/TPSC |
| | | 1 | | | | SSWACPTPRRPWAPAASSRLRR |
| | 1 | | | | | PPRGPACATPPPCRPPARRTCTG |
| | l | | l | | | RCPPSCCLCGSPTTWRRPPPTG |
| | | 1 | | | | GALESPKRR |
| 4114 | 34482 | A | 4155 | 15 | 263 | CGRFSEHSRSSAAGYRGGRPCC |
| | | | | | | \PSWEDDP/GAPPDPPASAQIPAP |
| | | | | | | TRSGCVRCSARPSPGPPAECAA |
| | | | | | 1 | GPSHWYNQSGTWKCKG |
| 4115 | 34483 | Α | 4156 | 3 | 518 | SPSVGSGMTPGAAGFSPSAASD |
| | l | | | 1 | | ASGFSPGYSPAWSPKPGVPGVP |
| | | | | 1 | | QVPSKPLKSLHPGGVVRHLSGQ |
| | | l | | | | VCFLHSSG*VCPLLISFVGCFPT |
| | | | | i | İ | GGAMSPSYSPTSPA\YEPRSPGG |
| | l | 1 | | | | YTPQSPSYSPTSPSYSPTSPSYSP |
| | l | 1 | 1 | | | TSPNYSPTSPSYSPTSPSYSPTSG |
| | | | | l | | SYSPTSPSYSPT |
| 4116 | 34484 | В | 4157 | 620 | 6763 | |
| 4117 | 34485 | С | 4158 | 430 | 870 | |
| 4118 | 34486 | Α | 4159 | I | 3039 | MDSETRRTAKVRLLMTVLRDQ |
| | į. | | | | | DRVSGVQAHPEQFQQAICPLCG |
| | | | | | 1 | VSLTRSGTTFGSPSEIYSPLGESR |
| 1 | į. | | | | | ASSGLPRRDGRLIGEEPPEKKFS |
| l | | | | | | RSPKGD/LSSGGQRIDYRVCVPT |
| | ļ | | İ | | | KFNL*VLSF*PRGQGAGGQSPG |
| | | | | | | FSVRRLLVLVWSSGTFV*NGK* |
| | ł | | ŀ | | | QKLL*TLCECVHD*GVQGPASG |
| | l | | | 1 | | SPVCSSTAKATEFEKDPSGPFSS |
| | | | | | | SSLPLTPYISFSRVTASSASPGLG |
| | | | | | | SALTPQTLKRKGRI*AICL*VVE |
| | | | | | | TPKVFR |
| 4119 | 34487 | Α | 4160 | 1 | 772 | MVARAFLWSQVIRRLGRKGGL |
| | 1 | | | | | SQGDRGCNTALAEGRLDPDLT |
| 1 | | | | | | RGHPALCLPRRPAPRPAEVRRE |
| | i . | | | ŀ | | GEAEQPEAGQPPGAAPRRARD |
| 1 | l . | | | | | NGAAAAAAGGRLLQSVRPAVV |
| | l | | | | | CPHPGPQASYGLRYIAKVLKNS |
| l | ŀ | | | | | IHEKFPDATEDELLKIVGNLLY |
| | | ĺ | | | | YRYMNPAIVAPDGFDIID\MTA |
| | | | | | | GGQNNSDQRKNLRSTAKVLQH |
| | | | | 1 | | AASNKLFEGENEHLSSMNNYLS |
| l | 1 | 1 | | l | | ETYQEFRFKNVTFDIIATEDVGI |
| | <u> </u> | <u> </u> | | | | FDVRSKFLGVEMEKVQLNIQ |
| 4120 | 34488 | Α | 4161 | 174 | 444 | YHRHDSWRNTRR*\IKLDGKGE |
| 1 | 1 | 1 | | l | | PKGAEESEATSKYTAAKLHEK |
| | 1 | 1 | | l | | GVLLDIDDLQTNQNAVNDFSV |
| 1 | | 1 | | l | | GPQDEVIVEDITNCYLCEIFKRY |
| | | | | | | EWVT |

| SEQ ID NO: | of peptide | Met hod | SEQ ID NO: in USSN | location of first | codon for last amino acid | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide |
|---------------|------------|------------|-----------------------|-------------------------------|---------------------------|---|
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 1121 | 34489 | Α | 4162 | 379 | 520 | GTSHRGASQRRCCPPLSKTGPI |
| | 1 | | l | ŀ | | TPCGKGAPSAP*QGGLDVQGE |
| | | 1 | 1 | | | GGK\GDSSGECVGGNVAGLHK |
| | 1 | 1 | | | | GGGTRADSQVPGGMRGGRMS |
| | l | 1 | | | | Y/GG/HLTAEGPMGRSGPR/GA |
| | l | l | | | | PSLYPPGFSRGSCSRQYSGAHN |
| | | ļ | | | | PILTGHVGWSESSLDPPRAGQI |
| | | 1 | | 1 | | RFLGTARP*GTSHRGASQRRC |
| | İ | 1 | | | | PPLSKTGPKTPCGKGAPSAPFI |
| | | | | | | AGPTFDHKALM |
| 122 | 34490 | Α | 4163 | 455 | 798 | |
| 123 | 34491 | Α | 4164 | 32 | 2109 | WIGGCPGSQPDATAIMGWTLA |
| | | | | | | PHSSRCHRCCHYRCHCRCCLC |
| | | l | | | | AEMTVGRPEGAPGGAEGSRQI |
| | | 1 | 1 | | | PPESFADTEAGEELSGDGLVLI |
| | | 1 | 1 | | | RASKLDEVLSPQEEIDPTSDST |
| | | ŀ | | | | SIYHTLLDLAQKGRWLSVWSI |
| | | ŀ | l | | | FSLTQRVMKTSLKMRRTWRV |
| | | 1 | | | 1 | SKTRTGGWCRSSARRL*GVAI |
| | 1 | 1 | | | | GAA/DSLNNLPSNIPRPQTQPP |
| | 1 | 1 | | | | GSRPPSOHRSVSSWASSITVPR |
| | | 1 | | | 1 | FRMTLREARKKAEWLGSPAS |
| | 1 | 1 | | İ | | EQERORAOROGEEEAECHRO |
| | 1 | | | | | RAQPVPAHVYLPLYQEIMERS |
| | 1 | l | | | ŀ | ARROAGIOKRKELLLSSLKPFS |
| | | ŀ | | | | LEKEEQLKEAARQRDLAATA |
| | 1 | | | l | | AKISKOKATRRIPKSILEPALG |
| | 1 | | ŀ | | | KLQEAELFRKIRIQMRALDML |
| | 1 | | | | | MASSPIASSSNRANPOPRTATI |
| | İ | | | | | QQEKLGFLHTNFRFQPRVNPV |
| | | ĺ | | | | PDYEGLYKAFORRAAKRRET |
| | 1 | | | | | EATRNKPFLLRTANLRHPORP |
| | | 1 | | | | DAATTGRRQDSPQPPATPLPR |
| | l | | | | | RSLSGLASLSANTLPVHITDAT |
| | | 1 | | | | KRESAVRSALEKKNKADESIO |
| | | | | | | WLEIHKKKSQAMSKSVTLRA |
| | | | | | | AMDPHKSLEEVFKAKLKENR |
| | | | i | | | NDRKRAKEYKKELEEMKORIO |
| | | | | | | |
| | | | | | | TRPYLFEQVAKDLAKKEAEQV |
| | | l | | | | YLDTLKQAG\RRKTL*ETRVK |
| | | | l | | | PGLFKRKRPKSRIFPGSKKLQN |
| | | | 1 | | | ASEIQSR/RLEGSLEQPASPRK\ |
| | L | | | | | LEELSHQSPENLVSLA |
| 124 | 34492 | A | 4165 | 251 | 637 | |

| SEQ ID NO: | SEQ ID NO: of peptide | | SEQ ID NO: in USSN | Nucleotide location of first | Nucleotide location of last codon for last amino acid | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide |
|---------------|--------------------------|----------|-----------------------|---------------------------------|--|---|
| 1.0. | sequence | 100 | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 4125 | 34493 | Α | 4166 | 1 | 1344 | PGRTTRSMAEDVFLSAPIPRGC |
| | | | | | | ADGRDADPTEEHMAQTERNDE |
| | | | | | | EQFECQELL*CHVQVGAPEEEE |
| | | | | | | EEEEDAVLVAEAEAVAAGWM |
| | | | | | | LNFLCLSLCRAFREGRSEDFRRT |
| | | | | | | RNSAEAIIHGLCSLTACQLRTIYI |
| | | | | | | CQFLTRIAAGKTLDAQFENDER |
| | | | | | | ITPLESALMIWGSIEKEHDKLHE |
| 1 | | | | | | EIQNLIKIQAIAVCMENGNFKG |
| | | | | | | AEEVFERIFGDPNS\HMPFKSKL |
| l | | | | | | LMIISQKDTFHSFF\QHFSYNHM |
| | | | | | | MEKIKSYV\NYVLSEKSSTFLM |
| | | | | | | KAAAKVVESKRTRTITSQDKPS |
| | | | | | | GNDVEMETEANLGYKKKC*LT |
| | | | | | | NSLR*LNPQRVQYPY*GSHKNL |
| l | Į | | | | | FLSKLQHGTQQQDLNKKERRV |
| | | | | | | GTPQSTKKKKESRRATESRIPVS |
| 1 | | | | | | KSQPVTPEKHRARKRQAWLWE |
| | | | 1 | | | EDKNLRSGVRKYGEGNWSKIL |
| ŀ | | | | | | LHYKFNNRTSVMLKDRWRTM |
| | l | 1 | | | | KKLKLISSDSED |
| 4126 | 34494 | Α | 4167 | 1 | 1345 | IPGSTISCLKGQYPSEPFNMAED |
| | | | | | | VSSAAPSPRGCADGRDADPTEE |
| 1 | | | | | | QMAETERNDEEQFERQELLEC |
| 1 | ł | | | ŀ | | QVQVGAPEEEEEEEEDAGLV |
| 1 | | | | | | AEAEAVAAGWMLDFLCLSLCR |
| | | | | l | | AFRDGRSEDFRRTRNSAEAIIHG |
| | | | | | | LSSLTACQLRTIYICQFLTRIAA |
| | | | | l | | GKTLDAQFENDERITPLESALMI |
| 1 | | 1 | | | | WGSIEKEHDKLHEEIQNLIKIQA |
| | | ŀ | i | | | IAVCMENGNFKEAEEVFERIFG |
| | İ | 1 | | | | DPNSHMPFKSKLLMIISQKDTF |
| | | | ŀ | | | HSFFQHFS\YNHMMEKIKSYVN |
| ١. | | | | | | YVLSEKSSTFLMKAAAKVVES |
| | | į. | | | | KRTRTITSQDKPSGNDVEMETE |
| 1 | | | | | | ANLDTRKRSHKNLFLSKLQHG |
| l | | | | | | TQQQDLNKKERRVGTLQSTKK |
| ł | | İ | l | | | KKESRRATESRIPVSKSQPVTPE |
| | | | | | | KHRARKRQAWLWEEDKNLRS |
| 1 | ł | | | | | GVRKYGEGNWSKILLHYKF\NN |
| | 1 | | 1 | | | R\TSVM\LKARWRTMKKLKLIS |
| | | <u> </u> | | | | SDSEDWIVFVKL |
| 4127 | 34495 | Λ | 4168 | 3 | 378 | LTSGSRADQGEGQEEGAEGGR |
| | | | | | | ASSSSSSSPRGPQHHPHLHGDP |
| | | | | | | AEHRPGHPLCSPPDLTVAYQ/M |
| | | | l | | | PEVPAEDM/SDPSFCSARQGGQ |
| | | | | | | RGLDSGPGAPWSSSHSPHSRFQ |
| | | | | | | EASHGACAGWRWCRQEEL |

| SEQ ID NO: | | | SEQ ID NO: in USSN | Nucleotide location of first | Nucleotide location of last codon for last amino acid | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide |
|---------------|------------------------|-----|-----------------------|---------------------------------|--|---|
| NO: | of peptide sequence | hod | 09/540,217 | codon for peptide | of peptide sequence | deletion, \-possible nucleotide insertion) |
| | Jequence | | 10000 | sequence | . , , , , , , , , , , , , , , , , , , , | |
| 4128 | 34496 | A | 4169 | 1 | 1044 | SGQEVNKEDGQADVQQDHHA |
| | | | | ŀ | | DEDGVGDLARQPHLFHLHLRL |
| | | | 1 | | ŀ | CROCGLLPRLLLGPRLGOPSSL: |
| | | ŀ | | | ł . | LAGLGPGLGFGDDGLGLQLGG |
| | | | | | | GLACRLGASERGGLQRGGGRG |
| | | | | | | RGRGLGPG/GPRARAGPQRVG |
| | | | | | | RAAWCAOHSCGSPGKAPPPAP |
| | | | | | | A/TGAGGACRASMAMRSVAGR |
| | | ľ | | | | AGLRRPAPSDGVTDRLPSPLGS |
| | | ļ. | | ł | | PFQAP/EAQQAVLGHPGPGPLG |
| | | | | | i | LRGRPGR*RGATLGPRGLT/PRA |
| | | 1 | | | | AAGSRGAAVGGPLRRRPGRGA |
| | | | ì | | | PAGSPSSPGSPAAAGASDIPDLA |
| | | | | | | GRSPEPAPWPKCEOCWTPGWO |
| İ | | | | İ | | PGRPVPLPQLWPWRGLSISGSM |
| | | | ł | | | PLGEGLEDGSDPMTPSCCLPGT |
| 4129 | 34497 | Α | 4170 | 1 | 732 | SLTOAGTVSLGLDAEGOEVFVI |
| | | | | l | | FSAVLPMVAPNDLVFDGWDISS |
| | | | | | | LNLAEAMRRAKVLDWGLOEO |
| | | 1 | | | | LWPHMEALRPRPSVYIPEFIAA |
| ŀ | 1 | 1 | l | | ł | NOSARADNLIPGSRAOQLEOIR |
| l | | l | | | | RDIRDFRSSAGLDKVIVLWTAN |
| l | | | | | i | TERFCEVIPGLNDTAENLLRTIE |
| ļ | | | | i | | LGLEVSPSTLF\AVASILGGLCLS |
| İ | | | | | | FNGSPONTLVPGALELA WOHR |
| | | | | | | VFVGGDDFKSGQTKVKSVLVD |
| | | | | | | FLIGFRLORP/VSIVSYNHLGNN |
| 4130 | 34498 | Α | 4171 | 1 | 908 | MEKAPPOTOHEGLKSKEHLPE |
| | | | | | | OTDEGKTEYRRVPSLRAVVLFF |
| | | | | ĺ | | ORSCIENILRACYGLPPONHML |
| | | | | | | LEHKMERPGPSLKRVGPVAAT |
| | | | | | | YPMLNKKGPLV WEVSPATLFA |
| | | | | | | VASILEGCAFLNGSPONTLVPG |
| | 1 | | | | | ALELAWOHRVFVGGDDFKSGC |
| | | | ł | | | TKVKSVLVDFLIGSGLKTMSIV |
| İ | | | | | | SYNHLG\NNDGENLSAPLQFRS |
| | | | | | | KEV\SRSNVVDDMVA\SNP\ML |
| | | | | | | YTPGEEPDHCRMGRNLPE*GSS |
| 4131 | 34499 | A | 4172 | 85 | 529 | ECGARPGSSTRPPARLSPRLFCS |
| | | | | | | AIRAALKTRPAPALACTWRTG* |
| | | | | 1 | | RASLPTTRCAGSGLGTCTAEGS |
| | | | | | | EGCSHPGPLTGTG/RQEACPGT |
| 1 | | | 1 | 1 | | APAGSPSCLHPRGRPRPCPPGTL |
| 1 | | | | l | | APRMSCPWPRSPPLTRYLPSGE |
| | | | | 1 | | NLOSKLESLNTSEKF |
| | | | | | | |

| SEO ID | ISEO ID NO: | Met | SEO ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|-------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *-Stop codon, /-possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | ŀ | sequence | | |
| 4133 | 34501 | A | 4174 | 2 | 505 | YKCEVCDKVFNQN*FLVCHNR |
| 4133 | 34301 | l^ | 71/7 | - | 303 | CHTGKKPYSCYECGKTFSOTSS |
| | | l | | l | 1 | FTCYRRLHTGGKPYKCSEHNK |
| | | l | | | | TFG*NSALVIHKAIHTGENPCKO |
| | | l | | l | 1 | NECGKVFNQKAHLARHHRLHT |
| | | l | | | | REKPYKCEECEKVFSRKSHLER |
| | | l | | | | |
| | | l | | | 1 | HKLKRGGVALV/C*ECPTVYQN |
| | 0.4500 | ļ | | | (100 | TSCLRSLSCSYPMSLNG |
| 4134 | 34502 | A | 4175 | 1 | 6192 | |
| 4135 | 34503 | Α | | 2 | 3389 | |
| 4136 | 34504 | Α | 4177 | 3 | 875 | GEEAALSLCMHSTDDATRLGA |
| | | l | | | | RDTEPLWHVPAQ/ARLSAIAGS |
| | İ | l | | | | SGNKHPSR/QDAAGKDSPNRHS |
| | | l | | l | | K\GSKPSAGSLRLSSREGEDRTA |
| | | l | | 1 | | WTGPRGAVEQEVTGPDLC*GR |
| | | l | | l | | GQQGLLVGWT**EQKRGQGKP |
| | | l | | | | QYSSHSSSNTLSSN/ASSSHSDD |
| | | l | | | | RWFDPLDPL/EPEQDPLS/KGCM |
| | | l | | l | | SLAK/APRPAKPHKPPGSMGLC/ |
| i | | | | i | | GGGREAAGRSHHADRR/REVSP |
| | | l | | l | | APAVAGQSKGYR/PKLYSSGSS |
| | | l | | | | TPTGLAGG/SRDPPRQPSTLWH |
| | | l | | | i | RTWYL/YHTASAAVHRGLCRE |
| | | | | l | | LEQADQIPPSWYGRRPMGNS |
| 4137 | 34505 | В | 4178 | 108 | 318 | |
| 4138 | 34506 | Α | 4179 | 103 | 540 | RRGCESHKTLRRGTSWGLDAR |
| | | l | | | | GGGPGPGQVSAGRDGAEVWLS |
| | i | l | | | | TCDRGHALSGSVEELLFLQN/G |
| | | l | | 1 | | ARTER*EGPGEWPRPPPPGLASP |
| | | l | | i | | ALWRFWAEQVGGSFQELESPS |
| | | l | | | | CRTARGSSRTWGSILQNSSWLF |
| | | l | | | | ODLGLHLAEGCFLETP |
| 4139 | 34507 | Λ | 4180 | 33 | 896 | KITRHCTAPGKIRIVPKESQEST |
| | | 1 | | | | PQQDGAPGPGRATSCSARWSPR |
| | | 1 | | l | | SWKSHELFCKMEPQVLEEPRA |
| | 1 | 1 | 1 | | | VLODGAPGPGRATSCSARKGR |
| | | 1 | | | | GPEKPVQGLPN/GSVRAHSGGR |
| | | l | | ĺ | 1 | AAPOPSPRGHGPGRG*TAAPLP |
| l | 1 | l | l | I | | HLCPLTPVLLQG*GPD*WPLGW |
| 1 | | l | l | | 1 | ATMRPLPLRAQPAPPPPHWML |
| | | 1 | 1 | | | LTPSAPPPGTGKPQGGRGQTSG |
| | | 1 | 1 | 1 | | SCVPATDPHCRLSAPSPGKLGPP |
| | | 1 | | 1 | | |
| | | | | l | | CDFLEPP*QRTTNWGSSEAGSP |
| | | l | | | | KSRCPRGHVPSGGSKGGIFLSL |
| | 0.1500 | _ | | ļ. — | 100 | HFPGAPQSLEFPGSQPHGLIGAS |
| 4140 | 34508 | В | 4181 | 1 | 625 | |

| SEQ ID NO: | SEQ ID NO: of peptide sequence | Met hod | SEQ ID NO: in USSN 09/540,217 | Nucleotide location of first codon for peptide sequence | Nucleotide location of last codon for last amino acid of peptide sequence | Amino acid sequence (X=Unknown, "-Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
|---------------|--------------------------------------|------------|-------------------------------------|--|---|---|
| 4141 | 34509 | Α | 4182 | 160 | 1149 | FASERMKVEPWRAGPGRRAWS |
| | | 1 | | | | EGAGQAPQKRARAGAEPQLPA |
| | | 1 | | | | TPALPGGKMVARRTKLA\RGTR |
| 1 | | 1 | | | | RT\YPEPTV\YAAIPIKFSEKQQA |
| | | 1 | | | | SHYLYVRAHGVRQGTKSTWPQ |
| | | 1 | | | 8 | KRTLFVLNVPPYCTEESLSRLLS |
| | | | | | | TCGLVQSVELQEKPDLAESPKE |
| | | 1 | 1 | | | SRSKFFHPKPVPGFQVAYVVFQ |
| ŀ | | 1 | | | | KPSGVSA ALALKGPLLVSTESH |
| | | 1 | | | | PVKSGIHKWISDYADSVPDPEA |
| | | 1 | | | | LRVEVDTFMEAYDQKIAEEEA |
| | | 1 | | | | KAKEEEGVPDEEGWVKVTRRG |
| | | | | | | RR\LCSPGLRQPACGCWRGRDG |
| | | ı | | | | SAA\KRAAQLLRLAASREQDGA |
| | | | | | | SSAA\RKKFEEDKQRIELLRAQR |
| | | | | | | KFRPY |
| 4142 | 34510 | Α | 4183 | 2 | 361 | GTMVARRTKLA\RGTRRTGIPS |
| | | | | | | PPC*A\AIPIMCSEKQQASHYLY |
| | | 1 | | | | GRAHGIQQGTKSTWPHKRTIFA |
| | | 1 | | | | FNGPPYCSEQESLSCLQSTCGL |
| | | | | | | VQSVKLKEKLELGWESRSKFFH |
| | | | | | | PKPVPVTEEQ |
| 4143 | 34511 | Α | 4184 | 917 | 1128 | |
| 4144 | 34512 | Α | 4185 | 1 | 660 | MAWQMMQLLLLALVTAAGSA |
| ŀ | | | | | | QPRSARARTDLLNVCMNAKYH |
| | | | | | | KTQPSPEDELYGQ/C/SWRKNA/ |
| | | | | | | CSFTSTTQEAHKN/TSHLYGFN |
| | | | | | | WNHCGEMVPACKRHFIQDTCL |
| | | | | | | YE*PPNLGPWI\RRYAWLPGIQE |
| | | | | | | LAEELNFPGVSAGSNPSSSSIQG |
| | | | | | | WVPGILEPEPFFSTKISQVDQSW |
| | | | | | | RKEWVLNVPLCKEDCEQWWE |
| | | | | | | DCRTSYTCKSNGHKGWNWTSG |
| | | - | | | | SNKCQVAAA |
| 4145 | 34513 | Α | 4186 | 216 | 781 | MDMAWQMMQLLLLALVTAA |
| l | | | | | | GSAQPR\SARA\RTDLLNVCMN |
| | | | | | | AKHHKTQPSPEDEAVWPDP/W |
| 1 | | l | | | | MCKGSCRKTKSWNI/HRKSKCE |
| 1 | 1 | 1 | 1 | | | VGLA/WEACSVSAGTGRGPGC |
| | | | | | | GRWVGAPQGP/CPRKCSSG*PT |
| | 1 | 1 | 1 | | | W/VQRSQNMEEMAVVNQSWR |
| | 1 | 1 | 1 | | 1 | KERILNVPLCKEDCERWWEDC |
| | | l | | 1 | 1 | RTSYTCKSNWHKGWNWTSAPS |
| | | l | | 1 | | AVCDPLL |

| SEQ ID | ISEO ID NO. | Me | SEQ ID NO: | Nucleotide | Nucleotide location of lost | Amino acid sequence (X-Unknown, |
|--------|-------------|------------|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| 1 | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | ' ' | |
| | | | | | | |
| 4146 | 34514 | Α | 4187 | 3 | 625 | QCRPWRKNACCSTNTSQEAHK |
| 1 | 1 | 1 | | | | DVSYLYRFNWNHCG\KMAPDC |
| | | 1 | | | | KRHFHPGTPALYE/CAPHNLGA |
| l | | 1 | | | | WDPAGWIQSWRKERVLNVPLC |
| | | | | | | KEDCEQWWEDCRTSYTCKSN |
| 1 | | ŀ | | | | WHKGWNWTSGFNK\CAVGAA |
| 1 | | ŀ | | | | CPTF\HFYFPTPTVLCNEIWTHS |
| | | | | | | YKVSNYSRGSGRCIQMWFDAS |
| 1 | | | 1 | | | PGATPIEEV\ARFY\VAAMSGAG |
| 1 | | | | l | | PWAAWPFLLSLALMLLWLLS |
| 4147 | 34515 | A | 4188 | 1 | 268 | EQGRH/GSSTPVGPRGGPR\GAE |
| | | | | | | HAPKHQGCGDRAGPQVGMDQ |
| | | 1 | | | | RRRDPPRAPAAPRPWCGQRAA |
| | | 1 | | | | LSSLGGSHLCDDA*VQPSAGLG |
| | | | | | | KVLKF |
| 4148 | 34516 | A | 4189 | 2 | 1632 | WKRCPGLPRAAATFPSGSGAG |
| 4140 | 34310 | <u> </u> ^ | 1107 | 1 | 1052 | GARREAGGRAPTPGPASPRTAR |
| 1 | | 1 | | | 1 | GHARNSPAPARTAGRTGSAGA |
| | | 1 | | | | WQTPCPAPLFPMSAGLPAACH |
| ŀ | | 1 | | | | WNPV*LRALKTG/LEGVLGGSA |
| 1 | | I | | | | DTOHNRVTDGSLAPN\AACVYT |
| 1 | | | | | | PKINGNRHPNTCTKMFIVSLDA |
| 1 | | | | | | |
| | | 1 | | | | KGKKWKQPTVHQQRKRETCG |
| į. | | 1 | | | | LHPRKCLQYTPS*WSTTTGILPS |
| l | | | | 1 | | RTPRISCVQFVKKKLGQAGLLG |
| | 1 | | |] | | HPGACLLCTLP*\PAGVGTFLFP |
| | | <u> </u> | | | | RGC*GVVH*LETHTCG |
| 4149 | 34517 | A | 4190 | 2 | 291 | |
| 4150 | 34518 | A | 4191 | 3 | | AND I WE TO DIVICE WALLATIA |
| 4151 | 34519 | Α | 4192 | 112 | 286 | AWLLWLTSLPWGSLYALALLA |
| | | | ļ | | | NKPAL*SLLLLRYTLLPPHHQC |
| | | _ | | | | EKVPRWNEPQPTLFP |
| 4152 | 34520 | A | 4193 | 1 | 933 | |
| 4153 | 34521 | В | 4194 | 1 | 999 | |
| 4154 | 34522 | Α | 4195 | 135 | 1160 | VWALVRSTLELFHTDDEEEGE |
| | | | | | | YDEVTEEVTEQVYLPAKAKVA |
| ì | 1 | | l | | | QEEEVHPYPSAPPHYYFEEKEW |
| 1 | | 1 | | | | PDPPDLSFLEDTGRKVVAPVTE |
| 1 | 1 | | | | | QHLERLLSVLFRQEFSRLDERD |
| 1 | | | | | | DAVEQLRGVCIRAWEKITSGGE |
| 1 | | 1 | | | | QYPSFSAVKQGPKELYADFIAW |
| | | | | | | NLLRQESLKKVISDSAAQDIVL |
| l | | | | i | | QLLAFGNVNLDCQAALRPIRGK |
| 1 | | 1 | 1 | | 1 | AHLVDYIKACDGIGAKQDSERF |
| | | | | | | AFTIPVVNNLOPAKHFHYFTDG |
| | | 1 | | 1 | | SSNGKASYSGSKGQNQQPIWIL |
| | | | 1 | | | SRHLKPYHEPDAKEEIPGG/CPR |
| 1 | | 1 | | | | TPWLOPCRD*C*GGP*/PVTSNT |
| | | 1 | 1 | l | | R*TOPPTWGQIKKLSQMVEENL |
| 1 | 1 | 1 | | 1 | | RKAGQLVTMTVYWN |
| Ц | L | <u> </u> | L | L | L | KKAGQLY IWII V I WN |

| SEQ ID | | | SEQ ID NO: | | | Amino acid sequence (X=Unknown, |
|--------|----------------|--------|--------------|-------------------------------|---------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | coden for last amino acid | |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | 1 | | | acqueice | | |
| 4155 | 34523 | Α | 4196 | 502 | 578 | LV*EDCIAERAEVLRNESYGIIID |
| | 1 | | | į. | | WSP*GMFSLNCTSQSACHGHT |
| | | | | | 1 | MFSW |
| 4156 | 34524 | Α | 4197 | 2 | 408 | |
| 4157 | 34525 | Α | 4198 | 3 | 853 | LLKVIMSAKIFTKKNENSTERL |
| | | | | 1 | | CGDGEKRGPDFRTERSVWLLR |
| | | | | | | LEEAVAMVQRGSRAPESRVVA |
| | | | | l | | QVLTLLDGASGDREVVVVGAT |
| l | | | | | | NRPDALDPALRRPGRFDREVVI |
| | | | | i | | GTPTLKQRKEILQVITSKMPISS |
| | | i | | i | | HVDLGLLAEMTVGYVGADLTA |
| | ì | | | | | LCREAAMHALLHSEKNQDNPV |
| | 1 | 1 | | İ | | IDEIDFLEAFKNIQPS/LVFEASL |
| ŀ | | 1 | | 1 | | GLMGIKPVDWEEIGGLEDVKPE |
| | | | | i | | VKTAH/WSLRQKSGHC/RSCAR |
| 1 | | | | | | LPTGLLATLGSGSGSGRATEAV |
| | | | | | | SGPAG*KRASIGGSSQRPRRFPT |
| 4158 | 34526 | A | 4199 | 266 | 370 | AERINSITVFSETLKRFLQASGK |
| | | | | | | *FHRDIHNSRN |
| 4159 | 34527 | Α | 4200 | 1 | 1780 | MGDVNQSVASDFILVGLFSHSG |
| | | | | | | SRQLLFSLVAVMFVIGLLGNTV |
| | ŀ | | 1 | i | | LLFLIRVDSRLHTPMYFLLSQLS |
| | | 1 | 1 | | | LFDIGCPMVTIPKMASDFLRGE |
| | | | | | | GATSYGGGAAQIFFLTLMGVA |
| | ļ | | | | | EGVLLVLMSYDRYVAVCQPLQ |
| | l | | | | | YPVLMRRQVCLLMMGSSWVV |
| | | | | l . | | GVLNASIQTSITLHFPYCASRIV |
| | | | | | | DHFFCEVPALLKLSCADTCAYE |
| | 1 | | l | | | MALSTSGVLILMLPLSLIATSYG |
| | | | | | | HVLQAVLSMRSEEARHKAVTT |
| | 1 | | | | | CSSHITVVGLFYGAAVFMYMV |
| 1 | | | | | | PCAYHSPQQDNVVSLFYSLVTP |
| | | 1 | | | | TLNPLIYSLRNPEERSHRGVKL |
| | ł | | | | | NECNQCFKVFSTKSNLTQHKRI |
| | | | | | | HTGEKPYDCSQCGKSFSSRSYL |
| | | 1 | | | | TIHKRIHNGEKPYECNHCGKAF |
| | | | | | | SDPSSLRLHLRIHTGEKPYECNQ |
| | ŀ | | | į | | CFHVFRTSCNLKSHKRIHTGEN |
| | 1 | | | | | HHECNQCGKAFSTRSSLTGHNS |
| | | | | | | IHTGEKPYECHDCGKTFRKSSY |
| | 1 | | | 1 | | LTQHVRTHTGEKPYECNECGK |
| | 1 | | | | | SFSSSFSLTVHKRIHTGEKPYEC |
| | - 30 | ĺ | | 1 | | SDCGKAFNNLSAVKKHLRTHT |
| | 1 | 1 | | | | GEKPYECNHCGKSFTSNSYLSV |
| ļ | 1 | 1 | | | | HKRIHNRWI*/YYCRNFWRKAL |
| 4160 | 24520 | - | 4201 | 10 | 182 | IDLSSLR*FERAHTGYISYLLQH |
| 4160 | 34528 34529 | С | 4201 4202 | 18 | 182 389 | |
| 4161 | 34529 | A C | 4202 | 114 | 548 | |
| +102 | 34330 | 10 | 14203 | 1114 | J-40 | |

| SEQ ID NO: | SEQ ID NO: of peptide sequence | | SEQ ID NO: in USSN 09/540,217 | Nucleotide location of first codon for peptide sequence | Nucleotide location of last codon for last amino acid of peptide sequence | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
|---------------|--------------------------------------|---|-------------------------------------|--|---|---|
| 4163 | 34531 | A | 4204 | 122 | 735 | LRAQQQHN*VLTLHKPACTLST TS*K*LHKIRK*LWHLRDRAPFI FTSEMEYFITEGGK/NPQHFQDF VELCCRAYNIIRKHSQLLUNLLE MNSYNGYVGLLHNILQLEREG LATKEELQQNFPPLSVSLPFDQS INOISEHRSLIPRGQYPYGSCWF |
| | | | | | - | RQAVCKLIQKYAGEWGWIATA ELRAEIDLNVLKFTIQVLSWKV QASLQ |
| 4164 | 34532 | A | 4205 | 139 | 4496 | KMAYSWOTIDPNPNESHEKQYE HIQEFLFVNQPHSSSQVSLGFDQI VDEISGKIPHYESEIDENTFFVPT APKWDSTGHISINEAHQISLNEF TSKSRELSWHQVSKAPAIGFSPS- VLPKPQNTNKECSWGSPIGKHH GADDSRFSILAPSFTSLDKINLE KELENENHNYHIGFESIPPTNS SFSSDFMPKEENKRSGHVNIVE PSLMLLKGSLQPGMWESTWQK NIESIGCSIQLVEVPQSSNTSLAS FCNKVKK |
| 4165 | 34533 | Α | 4206 | 1 | 3150 | MEKPRPLEAPSAWPQDDVQCG VTVGMDGAVKANRTPWPQD LEQTKWEIKKSAFTWSSQLSL NRGFLTCKDENNNAGLLRVSS YSSREDQLKNIASDSLFMLPGG LCQSPTGTSHCSNQMETQQQGS PGGAVRGDKALQPEKARQGCG MNGSGKYCKFRVLAIQGKPEC LATLMQPDLGSPGLERMNVV EHLRASFPVEQWYWRGGQRGE AEGARSSKAENNTSLICNFRLD YAPIEKQWDLHFADYFAEDLK |
| 4166 | 34534 | A | 4207 | 1 | 1203 | |

454

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | İ | sequence | | |
| 4167 | 34535 | Α | 4208 | li . | 1470 | MLHSRGFLAEVFGILARHNISV |
| | 1 | | | ľ | | DLITTSEVSVALTLDTTGSTSTG |
| | İ | | | | | DTLLTQSLLMELSALCRVEVEE |
| ł | | | | | | GLALVALIGNDLSKACGVGKE |
| 1 | | | | | | VFGVLEPFNIRMICYGASSHNL |
| | | | | | | CFLVPGEDAEODGTGTSGIGAO |
| | | | | İ | | KKKMYANNGAIDRKLLFEATF |
| | | | | | | VTIEKCCDTNOKGDDTHALGO |
| | | | | | | PIRGHDKSLAGSFCYACRSEEG |
| | | | | İ | | LSQYRAYDSRGQLIAVKDTQG |
| | | | | | | HETRYEYNIAGDLTAVIAPDGS |
| | | | | | | RNGTOYDAWGKAVRTTOGG\L |
| l | 1 | | | | | TRSV/EYD\AAGRVIRLTSENGS |
| | | | | | | HTTFRYDVLDRLIQETGFDGRT |
| 1 | | | | | | QRYHHDLTGKLIRSEDEGLVTH |
| | | | | | | WHYDEADRLTHRTVKGETAER |
| | | | | | | WOYDERGWLTDISHISEGHRV |
| i | | | | | | AVHYRYDEKGRLTGERQTVHH |
| | | | | | | POTEALLWOHETRHAYNAOGL |
| | 1 | | | | | ANRCIPOSLPAVEWLTYGSGYL |
| | | | | | | AGMKLGDTPLVEYTRDRLHRE |
| | 1 | | | | | TLRSFGRYELTTAYTPAGOLOS |
| | | | | | | OHLNSLLTYRHANFAL |
| 4168 | 34536 | A | 4209 | 757 | 907 | RRYCRITVRWOSM/WADNRIA |
| 4108 | 34330 | ^ | 4209 | l' ³⁷ | 307 | VDAHYPYR*CRS\GRVTEKND\ |
| | | | ŀ | | | LIPKG\VIRTDDERTHRYHYDSO |
| | | | | | | HRLVHYTRTOYAEPLVESRYL |
| 1 | | l | | | | YDPLGRRVAKRVWRRERDLTG |
| | | 1 | | | | WMSLSRKPQVTWYGWDGDRL |
| | i | | | | | TTIONDRTRIOTIYOPGSFTPLIR |
| | | | | | | VETATAVMDRILKDHQIVVDIP |
| | | | | | | HGEAWLRDDEERPMILIAGGTG |
| | | | | | | FSYARSILLTALARNPNRDITIY |
| | | | | 1 | | WGGREEOHLYDLCELEALSLK |
| 1 | | ŀ | | | | HPGLOVVPVVEOPEAGWRGRT |
| | | 1 | | l | | GTVLTAVLQDHGTLAEHDIYIA |
| | | ŀ | | | | GRFEMAKIARDLFCSERNARED |
| | | | 1 | l | | RLFGDAFAFI |
| 4160 | 24627 | В | 4210 | 1 | 3258 | KLIGDAFAFI |
| 4169 | 34537 | R | 4210 | l' | 3230 | L |

| SEQ ID SEQ ID NO: Met SEQ ID NO: Nucleotide Nucleotide location of last An | mino acid sequence (X=Unknown, |
|--|--|
| | Stop codon, /=possible nucleotide |
| | detion, (=possible nucleotide insertion) |
| sequence | |
| | |
| 4170 34538 A 4211 281 1571 CO | QCPGAACPTTSCRVIPHWA\Y |
| | EADRLT/HRTVN\GETAERWQ |
| | DER/GWLTDISHISEGHRVA/V |
| | YRYDEKGRLTGERQT/VHHPQ |
| | EALLWOHETRH/AYNAOGLA |
| | IRCIPDSL/PAVEWLTYGSGYL |
| | GMK/LGDT/PAANLDIRIPYAT |
| | PA/GNRLPDPELHPDSTLSM/W |
| | DNRIARDAHYLYRY/DRHGRL |
| | EKTDLIPEGV/IRTDDERTHRY |
| | IYDSQ/HRLVHYTRTQYAEPLV |
| | /SRYLYDPLGRRVAKRK/DRTR |
| | |
| | QTMYQPGSFTPL/IRVETATGE |
| | AKTQR/RQLADTLQQSDGED |
| | GS\VVFP\PVL\VQML\DR\LESE |
| | SADRVRSFISLANQSKCVEHA |
| | *RWQCHLGVCWWSSHQIPAV |
| | LTGSVTRWHCHLASSSEAGSV |
| | WLPHLSEGHSNRTSSPELLRS |
| | MCAWHTLSAQSVHLVSLYIL |
| | ILALMNSINSL |
| 4171 34539 A 4212 311 788 | |
| 11.12 510.10 11. 12.0 | IFHSVI\GVAAHKGGVYKTSVS |
| | 'HL\AQDVAEIT/LLEGNDPQGT |
|] | 'S*YQGPGRTLIPLEAALRNIAH |
| | LSIPPPKIFAAPTLRHYFALFFC |
| | HSLFAPHIELLEAGTVLQLPQ |
| | PWSSPTSF |
| 4173 34541 A 4214 I 1033 M | KMPEAIATKEKIDKWDLIKIK |
| | FFSTPKETINRVNRHHTEWEDI |
| | AIHLSDKGPISYIYKNLTRFTR |
| | KOPHYKVGKGNEQTRILESHP |
| | ILLKGLASTPFDSEGVRTERRD |
| | KDGILTQWLLTSYSARKLGLK |
| | TGHAGGIHNWRIAGOGLSFEO |
| | ILKEMGTGLVVPGTAENARSC |
| | RAYFYDIHETLCROEEMALSV |
| | DDHVREKLIWLRQHQEDMTI |
| | LSEVSAACLHCEKTLOODDCR |
| | |
| | VLAKQEITRLLETLQKQQQQF |
| | EVADHIQLDASIPVTFTKDNR |
| | |
| | HIG\PKM\EIRVVTLGIGMGAG |
| V: | NLLSLF*V*NRVEFHGSPFPTI |
| V: | |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------------------|---------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | eodon for last amino acid | |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 4175 | 34543 | Α | 4216 | 896 | 1626 | NATTIRYEHORVLKAAQYLHO |
| | | | | | | QGITRCNSSSTLTSAAPGRVDSP |
| 1 | | | | l | | PTSMIVAPALIIRFACFTASISEL |
| | | | | | | CVPPSEKESGVTLRIPITHLMRE |
| | | | | l | | LTCRLIRDKSATVTGSHTLVVA |
| | | | | | | RHCCYAAPGGCCLLANWLKPG |
| | | | | l | | LFGPIGVLSRRGTSVILPIGGFY |
| | | | | l | | OWNPMICPNGVVPMQHG*RRG |
| ĺ | | | | l | | LAQERPLEEWLPVCRDMLNAF |
| | | | | | | FLPDAETEAAMTLIEQQWQAII |
| | | | | | | AEGLGAQYGDAVPLSLLRDEL |
| | | | | | | AQRLDQERISQRFLAGPVNICTL |
| l | | | | | | MPMRSIPFKVVCLLGMNDGVY |
| | | | | | | PRQLAPLGFDLMSQKPKRGDRS |
| | | | | | | RRDDDRYLFLEALISAQQKLYI |
| | | | | | | SYIGRSIQDNSERFPSVLVQELI |
| | | | | | | DYIGQSHYLPGDEALNCDESEA |
| | | l | | | | RVKAHLTCLHTRMPFDPQNYQ |
| i | | | | | | PGERQSYAREWLPAASQAGKA |
| | | l | | | | HSEFVQPLPFTLPETVPLKRYN |
| | | l | | | | DSVRAPTCAESRAIFTSTRNNTL |
| | | | | | | QLFFNANFRRPWARGLATNVN |
| | | | | | | DRRASVDHQIRMFHRIYQRVM |
| | | | | | | RATIRKGIRRDVEDPHYSSDAG |
| | | l | | | | TYLSPNSRQISNGNWQSHIGRSP |
| į. | | l | | | | SLLLCRTWGLLFTGKLVETRFI |
| | | | | | | WPNRGVIPTGNERYIAHRRFLP |
| | | | | | | MEPDDMPQWRCPHATWLAEA |
| | | | | | | KMFDSLAKAGKYLGQAAKLMI |
| | | | | | | GMPDYDNYVEHMRVNHPDQT |
| | | | | | | PMTYEEFFRERQDARYGGKGG |
| 4176 | 34544 | A | 4217 | 838 | 1575 | CFFLSPSPPSSPPSPNRSQTTEEE |
| | | l | | | | TKRQE/ERERKREEEEEKKGRR |
| | | | | | | KETKKRRNRQEGKQHRKEEKE |
| l | | | | | | GEKQTKQRTETERETKRRRENE |
| | | | | | | QAKAHKGTRKRKEEQKKAKA |
| | | | | | | ARRRTHKRQNPSRGREGTHPK |
| | | | | l | | QRQGKEE/VNRQNKEEAKQKR |
| 1 | | | | l | | EEAGRTRR/EDRGRKDDKKERR |
| 1 | | | | I | | QQQTEKKAKPKAEHGQERTDT |
| İ | | | | | | TTKKARQREGRPSERRREREE/ |
| l | | | | i | | MSKHDPQNRAEKTNEEKEEGR |
| | | | | l | | QHER*TQKSSTGI |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|----------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | | *=Stop codon, /=possible nucleotide |
| | sequence | 1 | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 4177 | 34545 | A | 4218 | ti | 692 | MNALHAEALEMTSQFDQELAA |
| | | | | | | KFEADHEMALLMNKDFDRDRE |
| i | | | | | | EQRRLAEQARREHEERIKREAA |
| | | | | | | EQARRDAEAKHKAEIEAAARR |
| | | | | | | EAEEKARAELAERORIEAEORA |
| l | | | | | | EREKKETEERARREKEEAVAAE |
| 1 | | | | | | RRRQEEAEAARLVEEQRKAEE |
| | | | | | | EARRAADKEHRRTVNRR/GLRR |
| | | | | | | SDCSGHPRRIRTESSAGDRWRO |
| | | | | | | SAGRAHOILROT*THTSLTTAS |
| | | | | | | KNGAGLSSNSPTRKRS |
| 4178 | 34546 | Α | 4219 | 3 | 1120 | |
| 4179 | 34547 | Α | 4220 | 1 | 831 | MVKARKIMETPQPAWEMRVRI |
| | | | | | ł | CTVDWSKLNPYIPDDFSLIKSEK |
| | | | | | ļ. | KYDHPELIVDESNLRVVYAPSR |
| | | | | | l | YFASEPKADVSLILRNPKAMDS |
| | | | | 1 | | ARNQALLEGYFSFTATEDQLEQ |
| | 1 | ı | | l | | AKSWYNQMMD/SPEKGKAFEH |
| | | | | i | | GNMPA\QMLLQVPYFLRE\ERE |
| | | | | | | H*IIITPILHMRKQEQSG*/RNLP |
| | | | | | | KAAQLSMMQDLQTLLMAASY |
| | | 1 | | | | CSELGHVATQFQGMLACTRNP |
| | | 1 | | | | NSWDRNSETSGKAEGFIPMQLG |
| | | | | | | DVADPSVRCSSVSSLWGHSSPK |
| 4100 | 24540 | ١. | 1221 | ļ | 1503 | LLRSVCMANRICVKLQRWT |
| 4180 | 34548 34549 | A | 4221 | 1 | 1113 | |
| 4182 | 34550 | B | 4223 | <u> </u> | 760 | |
| 4183 | 34551 | В | 4224 | 1 | 1755 | |
| 4184 | 34552 | c | 4225 | i | 4215 | |
| 4185 | 34553 | A | 4226 | 1 | 3240 | |
| 4186 | 34554 | Α | 4227 | 1989 | 2144 | |
| 4187 | 34555 | Α | 4228 | 1 | 1203 | |
| 4188 | 34556 | Α | 4229 | 1 | 4767 | |
| 4189 | 34557 | Α | 4230 | 31 | 512 | EYRKSPDIRPIVIQHGEEAEITH |
| | | 1 | | | 1 | HFR*QELADKTLIFEITHREMQR |
| | | 1 | | | | FQPVGTGDIREPVFVFFRWRLT |
| | | | | ł | | NPFNILEHGEPEGIRVDAAVPR |
| | | 1 | | | | AVIGGLEDHIGVAVQKLQHKTF |
| | 1 | 1 | | | | RYFPFIIQMVKDGVVPEGRPAF |
| | | | | | | VHHLSLFLRIKILAHLTHNTQDF |
| 4190 | 34558 | Α | 4231 | 369 | 918 | RPGMSNPWRDLFRTGVDPTND |
| | | | | | | RLSALVEI/YRMMRPGEPPTREA |
| 1 | | 1 | | 1 | 1 | AE/SLFENLFFSEDRYDLSA/VG |
| 1 | | | | 1 | 1 | RMKFNRSLLREEIE/GSGILSKD |
| 1 | | 1 | | | I | DIIDVMKKL/IDIRNG/KGEVDDI |
| | | | | 1 | 1 | DHLG/NRRIRSVGEMAENQFRV |
| | | 1 | | 1 | I | /GLVRCTGTVPPFLHQQKCEYH |
| 1 | | | | 1 | | L/PQRPVASTLSRYF*HFRLRNF |
| 1 | 1 | 1 | 1 | 1 | | SMPRANEIKKGMV |

| SEO ID | SEO ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------------|------------|----------------|--------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nuclcotide |
| | sequence | l | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | 1 | | | sequence | | |
| 4191 | 34559 | A | 4232 | 3 | 1012 | SVVLKIVERVDGYFPSPPLFLGA |
| | | l | | | | AFGSHVRSRALPDPCVLFRVTI |
| | | l | | | | YLCVLASVARTFSPLLPVSRKK |
| | 1 | | | | | HITPLGGFQLHETHLCLQDCRTI |
| | 1 | 1 | | | | ILRPRLGEFGNKFSQLVDTIDLH |
| | 1 | 1 | | | l | NQHGLAHL*KESARGQYSLLL |
| | | 1 | | | | LGMVSLCALILILWRVVYRSVT |
| | 1 | 1 | | | | CPLADQTQALHRLLDGDIVSPF |
| | 1 | ı | | | | PETAGVRELDTIGRLMDAFRSN |
| | ł | 1 | | | | VHALNRHREQLAAQVKARTAE |
| l | 1 | 1 | | i | | LQELVIEHRQARAEAEKASQAK |
| | | l | | i | | SAFLAAMSHEIRTPLYGILGTA |
| | | l | | | | QLLADNPALNAQRDDLRAITDS |
| | | ı | | | | GESLLTILNDILDYSAIEAGG\K |
| | 1 | l | | | | NVSVQSYVARLEPVAASGWHK |
| | 1 | l | | | 1 | YPWLN |
| 4192 | 34560 | A | 4233 | 1 | 502 | |
| 4193 | 34561 | Α | 4234 | 1 | 653 | |
| 4194 | 34562 | Α | 4235 | 2 | 300 | YALATPPLSV/INQWQLALDKG |
| | l | l | | | | QLPTF/VAGLAPQHPQYAAMHE |
| | i | l | | | | SYWPYSALR/EILQRTGMLDGG |
| | 1 | l | | | İ | PKITL/PGDDTPTDAVVSPSAVT |
| | | <u></u> | | | | NSHGR*VPTLGGVWGL |
| 4195 | 34563 | С | 4236 | 40 | 105 | |
| 4196 | 34564 | Α | 4237 | 355 | 526 | |
| 4197 | 34565 | Α | 4238 | 116 | 949 | RPGTGRCSAVQLPVLLLRGPHS |
| | Ì | l | | | | SHTVGTH\MVDLDSGQLCVYP |
| | | 1 | | | | GNSDESMPAATQARERLLADT |
| | 1 | ı | | | | AKKKAQIAELQSFVSRFSANA* |
| | | ı | | | 1 | KSRQATSRARQIDKIKLEEVKA |
| | İ | l | | | | SSRQNPFIRFEQDKKLFRNALE |
| | | | | | | VEGLTKGFDNGPLFKTLNLVL\ |
| | | | | | | EVGENLPVLGTNGVGKSTL\LK |
| | | l | | | | TLVGDLHPDSGTVKWSENARI |
| Į | | 1 | | | | GYYAQDHEYEFENDLPVFEWM |
| | | 1 | | | ŀ | SQWKQEGDDEQAVRSILGRLLF |
| | | l | | | | SQGDIKKPAKVLSGGEKGRML |
| | | ļ | | | | FGKLMMQKPNILIMDEPPTHP |
| 4198 | 34566 | Α | 4239 | 1 | 319 | MVKKMARAPMI\L\ALANPEPEI |
| | 1 | | | | | LACRHGRKEVRPDAIIC\TPGRS |
| | 1 | 1 | | l | | DYPNQSETNVL\CFPANVHRIPQ |
| | | 1 | | | | AASHLRAHQSRIPISLMSISAKIL |
| 4100 | 24567 | D | 1210 | 262 | 1200 | TYLLANQIQFLVKQH |
| 4199 4200 | 34567 | В | 4240 4241 | 263 | 1390 323 | |
| 4200 | 34568 | A | 4241 | 3 | 1855 | |
| 4201 | 24209 | I ^A | 4242 | 2 | ددوا | |

| SEQ ID | SEO ID NO: | Met | SEO ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|----------------|------------|-------------------|-----------------------------|---|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 4202 | 34570 | A | 4243 | 2 | 964 | LLKHGVSLYIQDKEGLSALDLV |
| 4202 | 34370 | l^ | 4243 | _ | 704 | MKDRPTHVVFKNTDPTDVYTW |
| | | | | İ | | GDNTNFTLGHGSQN\$KHHPEL |
| | | 1 | | l | | VDLFSRSGIYIKQVVLCKFHSVF |
| | l | l | | l | | LSOKGOVYTWGHGPG\GRLGT |
| | | | | | | WEMNRHAWVPRLVGRD*MVII |
| | | | | İ | | VSPSWPAAKDHTVVLTEDGCV |
| | | | | | | YTFGLNIFHQLGIIPPPSSCNVPR |
| | | | | | | QGLHNRQNRRYPPVPGSAGPTS |
| | | 1 | | | | MEPSKIRPTGLKFSLTTQQQSEI |
| | | 1 | | | | DLGCSSLCWDYRREPLRLAYW |
| | | 1 | |] | | FIKKDIAKDTDEETRRHGVSLYI |
| | | l | | | | |
| | | 1 | | | | QDKEGLSALDLVMKDRPTHVV |
| | | 1 | | | | FKNTGSLQFQSIPSCRESQILSEK |
| 1202 | 0.4553 | | 10.11 | | 725 | QGDLFREEPMFGS |
| 4203 | 34571 | A | 4244 | l' | /25 | FRVDPRVRKHFGLFYAMGIVL |
| | | 1 | | | | MMEGVLSAC*HVCPNYSNFQF |
| | | | | ì | | DTSFMYMIAGLCMLKLYQTRH |
| | | 1 | | i | | PDINASAYSAYASFAVVIMVTV |
| 1 | | 1 | | | | LGVVFGKNDVWFWVIFSAIHV |
| | 1 | 1 | | | | LASLALSTQIYYMGRFKIDLGIF |
| | l | | | | | RRAAMVFYTDCIQQCSRPLYM |
| | | l | | | | DRMVLLVVGNLVNWSFALFGL |
| | | | | | | IYRPRDFASYMLGIFICNLLLYL |
| | | 1 | | | | AFYIIMKLRSS*KVLPVPLFCIV |
| 1001 | 24602 | ١. | 4245 | 1 | 833 | ATAGMWAC\ALYFFFQNLSSW |
| 4204 | 34572 | A | 4245 | ¹ | 833 | MKPVWVATLLWMLLLVPRLG |
| | | | | | | AARKGSPEEASFYYGTFPLGFS |
| | | ŀ | | l | | WGVGSSAYQTEGAWDQDGKG PSIWDVFTHSGKGKVLGNETA |
| l | | 1 | | | | DVACDGYYKVQEDIILLRELHV |
| | | | | l | | NHYRFSLSWPRLLPTGIRAEOV |
| 1 | | 1 | | ŀ | | NKKGIEFYSDLIDALLSSNITPIV |
| | | 1 | | | | |
| | | | | | | TLHHWDLPQLLQVKYGGWQN VSMANYFRDYANLCFEAFGDR |
| | | 1 | | | | VKHWITFSDPRAMAEKGYETG |
| | | | | | | HHAPGLKLRGTGLYKAAHHII/ |
| | l | 1 | | | | KAHTL*VCFHAADKGIPETEKK |
| | | | | | | |
| 1205 | 24572 | A | 4246 | | 672 | RRLNWTYSSTWLGRFHNHGRG GTQNAVNG/VIIFLSWGDAVKS |
| 4205 | 34573 | l ^A | 4240 | 1' | 072 | FWIYRGGRKREGPLFHA*O\FLI |
| | | 1 | | | | |
| | 1 | 1 | l | I | | YTIIIRAVGSIINYVIANYKLKFI |
| | | 1 | | l | | TPGVIDFICTSLIAGILTIKLFLLI |
| | | 1 | | I | | NQFEKQQIKKGRDITSARIMSRI |
| | | | | l | | IKITIIVGLVLLYGEHFGMSLSG |
| | | 1 | | · | | LLTFGGIGGLAVGMAGKDILSN |
| l | | l | | l | | FFSGIMLYFDRPFSIGDWIRSPD |
| | 1 | 1 | | 1 | | RNIEGTVAEIGWRITKITTFDNR |
| L | L | L | | L | l | PLYVPNSLFSSISVENPG |

| SEQ ID | SEQ ID NO: | | SEQ ID NO: | Nucleotide | | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|---------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | ŀ | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 4206 | 34574 | Α | 4247 | 1 | 347 | PLRP\GQPGPGGAGT/RALRAPP |
| | | ŀ | | | | LPSSSELCYGPGQPGRWPRCPQ |
| | | ŀ | | | | FPSLPPHSS*LLHTGHWPCTLGY |
| | | | | | | CFIPILRAAPPLPCKCASPVL\SC |
| | | | | | | TYPLPAAPSLPVLVHTSIKCFCF |
| | | | | | | HLQ |
| 4207 | 34575 | Α | 4248 | 43 | 446 | VLPAVPRPGQ/PPCVPAPVQAPE |
| | | | | | | PPRPSPGWSQATGSPGPAGAAP |
| | | | | | | SWR\GLPAVPGHTAGVLGPGPP |
| | | | | | | GQRQPGPGGAGTQLCGPHLFL |
| | | | | | | RLLNVAYGPGQPAL/RNVPLQT |
| | | | | | | APALTPSPQHLLCPFLSTHLLNA |
| | | | | | | SVFIC |
| 4208 | 34576 | Α | 4249 | 1 | 1521 | RIPESRLPTTAFVQAPWARSGSS |
| | | | | | | GLRRWEKHAGQQVGWWARGP |
| | | | | | | GVRGRQAAGGGAAALTCRGG |
| | | | | | | AGSAVRSCAGLPSLASGSAGCR |
| | | | | | | LHPSYSFGFKVGS/PTVPAALSS |
| ŀ | | | | | | *STS/RGREHGGVTVVPVMTQN |
| ŀ | | 1 | | | | PRS\PDGPARVEDCEAIA*GTG |
| | | 1 | | | | WL\QQGIGTRPPGTGLGRAR\G |
| | | 1 | | | | APAVPQWNPV\KSCQGPGHPNR |
| | | 1 | | | | LPSHGPSSGEAGRGW/RGLQITP |
| | | 1 | | | | QL/PEVTHRRVLPGDHPATEA\G |
| ŀ | | | | | | GFGTG*PGLPGRVPGPGVGGTY |
| | | | | | | QAKALTPLGPVGLLAPASCAQC |
| | | 1 | | | | LQQSADGPGATGHL*ELAESQC |
| İ | | | | | | RRQPTG\PPGQLAVSGWATVPG |
| | | | | | | VPAAPRPFGPAQQPA/SVPTPSY |
| | | | | | | WA/GSPGAAAWPESHRR*ACD |
| | | l | | | | WAW**VLPAVPRPGQ/PPCVPA |
| ŀ | | | | | | PVQ\PQSHRGPAHDGARLY*GL |
| l | | | | | | PQAEQLHPGGGLPAVPGHTAG |
| 1 | | | | | | VLGPGPPGQRQPGPGGAGTQL |
| l | | 1 | | | | CGPHLFLCFLNVAYGPGQPGR |
| | | 1 | | | | WPRCPQFPFLPPILSWNIFGVGT |
| | | L | | | | QKKKKKNQSFLKKKKKK |
| 4209 | 34577 | A | 4250 | 167 | 582 | RSLGLAVTEMVPWVRTMGQK |
| | | | | | | LKQRLRLDVGREICRQYPLFCF |
| | | 1 | l | | | LLLCLSAASLLLNR*RRSAEPGR |
| | | 1 | | | | RL/SL/LKVQTPGPCCLTVRRPRS |
| l | | | | | | CGTGDQWGERAPQRSGLGEHG |
| 1 | - | | | | | GASRPEAQAGGVGLIASFPEAS |
| | | ĺ | | | | SPELPFSHP |

| SEQ ID NO: | SEQ ID NO: of peptide sequence | Met hod | SEQ ID NO: in USSN 09/540,217 | Nucleotide location of first codon for peptide sequence | Nucleotide location of last codon for last amino acid of peptide sequence | Amino acid sequence (X-Unknown, *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
|---------------|--------------------------------------|------------|-------------------------------------|--|---|---|
| 4210 | 34578 | Α | 4251 | 402 | 1465 | DLILSHPTAWFTIKYKPKQLGL QELFPQGHSCAVCGKVKCKRH |
| | | l | i | | | RPSLLLENYQPWLDLKISSKVE\ |
| | | | | | | ESLSKDLELVLENFVYPWYRD |
| | | | | | | VTDDESFVDELRITLRFFASVLI |
| 1 | | | | | | RRIHKVDIPSIYNQETIKSSNESI |
| i | | l | | | | *KWIVKARQKVKNTEFLQQAA |
| | l | | | | | LEEYGPELHVALRSRRDELHYL |
| | | | | | | RKLTELLFPYILPPKATDCRSLT |
| | | | | l | | LLIREILSGSVFLPSLDFLADPDT |
| | | ļ | | i | | VNHLLIIFIDDSPAEKATEPASTL |
| | 1 | 1 | | l | | VPFLQKFAEPRNKKPSVLKLEL |
| | l | 1 | | l | | KQIREQQDLLFRFMNFLKQEGA |
| | | İ | | l | | VHVL\QFCLTVEEFNDRILRPEL |
| | İ | | | l | | SNG*NAVSS/WKNCRRFIKHTV |
| | | | | 1 | _ | WMKVLTKLDLIPSLVEEIPR |
| 4211 | 34579 | Α | 4252 | 1 | 1232 | FPGRRFRLVVRLRGAEAASERQ |
| 1 | i | | | l | | VYSVTMKLLLLHPAFQSCLLLT |
| | 1 | | | l | | LLGLWRTTPEAHASSPGAPAIS |
| | | | | l | | AASFL*DLIHRYGEGDSLTLQQ |
| | İ | l | | | | LKALLNHLDVGVGRGNVSQHV |
| 1 | | l | | İ | | QGHRNPTTCFSSGDLFTAHNF\S |
| | | | | 1 | | EQLRIGSSELHEFCPTILQQLDS |
| | | | | ļ | | RACTSENQENEENEQTEEGRPS |
| | | | | | 1 | AVEVWGFGFLSVSLINLASLLG |
| | | | | l | | VLVLPCTEKAFFSRVLTYFIALS |
| | | | | | | IGTLLSNALFQLIPERSYKNKAQ |
| | | | | | | VDSLPTFLAQAGMLLWRVRIR |
| | i | | | | Į. | RRVVDPIRESWMLPFTKIPLWG |
| | | | | ١. | | YGLLCVTVISLCSLLGASVVPF |
| | | | | | | MKKTFYKRLLLYFIALAIGTLY |
| | | | i . | | | SNALFQLIPENRRKWWQPVHN |
| 1 | Į. | | | | | TFGGSTAWHTDKSIEQSIDTLFD |
| 1 | | 1 | | | | EVKKESEKETPSLQIGDLGPQES |
| | | <u> </u> | | | | LKTFNNTNSPHH |
| 4212 | 34580 | A | 4253 | 3 | 924 | VGACTAAARPLPIPQLQPILHHR |
| | | | | l | | GEKSQLWAHSGSSWGFLAVAA |
| | i | 1 | | | | VPPSHLCPPLQSRGWKRPP/PLA |
| | | | | i | | SAGVLPGCCCCACLVSPSLAQP |
| | | 1 | | | | AG\LGPKPAAPLGPGPWVSVAP |
| į. | ł | l | | | | CSRPGPCPGTRSPA/P*GHPAMG |
| 1 | | 1 | 1 | l | | R\GVHEPRVGPAPPEKAIITETG |
| 1 | 1 | 1 | | l | | AGLAERRGQGLGGGSSFRSAEP |
| | 1 | | | | | QGCRSLGPQSPGGDPAHTILRPP |
| | | 1 | | | | SQNGDCAEMHACRLHPAILGT |
| 1 | | 1 | | l | | HGTGGLAAQSHAPRALLPSCPS |
| | | | | l | | SQQPADGWCSLHLCLPGLLLAP |
| 1 | 1 | 1 | | | | RIHGPSTREGGPGHGTPGPTNP |
| | l | <u>L.</u> | L | | | ASSGATRGTRRVRPSVPRSPTL |

| SEQ ID NO: | SEQ ID NO: of peptide sequence | | SEQ ID NO: in USSN 09/540,217 | Nucleotide Incation of first codon for peptide sequence | Nucleotide location of last codon for last amino acid of peptide sequence | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
|---------------|--------------------------------------|---|-------------------------------------|--|---|--|
| 4213 | 34581 | A | 4254 | 1 | 318 | VADPVGAARAGGQPLAGRVW PRAGGGHSPRVLGAAGPGPHV CTLRLPGTAIRTEPGAPLACAR AWPGSSPAG/PECLPTSC*P*EG QEPSSHVASLPWGPGVGETQ |
| 4214 | 34582 | A | 4255 | | 718 | FFFFFSFLCHLYWVSPTFGPHG KLANMANWAPWPS*GLSKLVG KHSCPAG*LPGHARAQASGAP G/ISPDSSAREA*ECT/PCGPGPA APSTRGECPPPSSRPHS'SQQDP GRCSFAPAVPQDAGGGGHWCC APATGHSAPRGCPPARAAPTGS ATPAPPPAACAASSLSMVSAPS R*TTGIASSGTSIPETKHQGTPG TAPAGTGPGGSTGPKA/PGPAP AHPTRLAGTSGHTAPPTCPPAV |
| 4215 | 34583 | A | 4256 | 702 | 1026 | RSGRTQRAAGVSGSALHQVQS WPHILKISADQRAGLLF*EHPFP PSASSGCLDVSISSYPVGD*FIN GMARANGRWKTFTGLHSGKPL GFSDAFCQHHNLIILCWKTW |
| 4216 . | 34584 | A | 4257 | 170 | 1049 | RGSGCSAELVPSSRWRPGSRAG AAAGTETPG*PRVYVPAGNGE AGGPGAAWARRAAALPGTAA GPPRPAARPGAAPARGGPAGA SPPSWGSIAQPGHPGDLAAGVG RGAGGGHSRRGRHHWSLAD LQLPGAAEGAGDRGHLPGPD/ GERS*AASSPSAAGRAAGTASC CSAGGTPSPSPCTILSTSSSSLAH VASSS/RRAEGDTKVS/RGRAE GQDSETGREPGVLHRGSGRTQ RAAGVSGSRAS PSPVVATTSRS LLTSVQGCFSENILSP |
| 4217 | 34585 | A | 4258 | 178 | 556 | QSPQEHFHPECGRRDILCQVRQ EIRWPNPGEVHHLGLEICPVWI LQLHLALRTRAPEHPLQVHRPG GGAV*RGVPPPLRLLQACDGPE VPAAGRPRPARSSPGQWPP*/PA AVAPPVTERPPTPSAA |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|---------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \-possible nucleotide insertion) |
| | | | | sequence | | |
| 4218 | 34586 | A | 4259 | 5 | 1044 | TGRILDGWHWAKELRLDCPLG |
| 7210 | 34500 | l^ | 7237 | ľ | 1044 | DSRRPPFSRVSTEGSPAFLALRL |
| | | | | | | PNVTAGS*EVSMLASTETPLVIT |
| | | | | | | RPSPG\GHDPGPAPRGAAASPA |
| | 1 | | | | | GSPAP*OKSPRPLSAAAPPLLAS |
| | 1 | | | | | DPAPPRAAAPPADTESSVOPPA |
| | 1 | 1 | | | | APHAGPWT\PSAPGPLDVHSPPP |
| | | | | | | \PSRGPFVQSSAEPHNRPSPGAT |
| | | | | | | RPRP\PPRGAAASPAGSPAP*QK |
| 1 | | | | | | SPRPLSAAAPPLLASDPAPPRAA |
| İ | | | | | | APPADTESSVOPPAAPHAGPWT |
| | | | | | | LERSWAP*RSLPTPIPVADPLCR |
| | | | | | | APLSHRYP*GDCQRSGLCHTSP |
| | | | | | | GRASHLPGPGAHKRTPHACWL |
| | | Į. | | | | PLECHRRSPHP*THPSG*PGPSP |
| l | | ŀ | | | | OSFFPEFLGSGP |
| 4219 | 34587 | Α | 4260 | 2 | 576 | CLVNSTTRRSFOLRLVPVPKFO |
| | | | | | | PPHMTVR*LFNFGROLTATTFS/ |
| | | ı | | | | LRKSYAVREAYELONCPDPPPF |
| | | 1 | | | | QNGYMINSDYSVGQSVSFECYP |
| | | l | | | | GYILIGHPVLTCQHGINRNWNY |
| | | | | | | PFPRCDAPCGYNVTSQNGTIYS |
| | İ | 1 | | | | PGFPDEYPILKDCIWLITVPPGH |
| | | l | | | | GVYINFTLLHTEAVNDHIAVW |
| | | 1 | | | | YENLSSQNICDCDQQF |
| 4220 | 34588 | Α | 4261 | 1 | 837 | MWAGNAWRAALSGVPCGRSA |
| | 1 | l | | | | QSVLAQLRGILEGELEGIRGAG |
| į. | | 1 | | | | TWKSERVITSRQGPHIHVDGVS |
| | | 1 | | | | GGILNLTSVRFIRGTQSIHKNLE |
| | | 1 | | | | AKIARFHQREDAILYPSCCDAN |
| | | l | | | | AGLFEVLLRPEDAVLSDELNCA |
| | | | | | | SIIHGICLCKAHKYHYCHLDVA |
| | | ĺ | | | | YLETKLQEAQKHRLFLVATDG |
| | | 1 | | l | | AFSMDGDIVPLQKICRLASRYG |
| | | l | | l | | ALVFVDECHATGFLGLTGQGT |
| | | l | | | | DELLGVMGQVTIINSTLGKALG |
| | 1 | l | | l | l | GASGGYTTGPGPLVSLL/RAQP |
| | 1 | l | | 1 | | YLFSNSLPPAVVGCTSKAL |

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| | WO 01/075067 PCT | | | | | | | | |
|---------------|--------------------------------------|-----|-------------------------------------|--|---|---|--|--|--|
| SEQ ID NO: | SEQ ID NO: of peptide sequence | Met | SEQ ID NO: in USSN 09/540,217 | Nucleotide location of first codon for peptide sequence | Nucleotide location of last codon for last amino acid of peptide sequence | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) | | | |
| 4221 | 34589 | A | 4262 | | 2142 | MIILIDAEKAFDKIQQPFMLKTI NKLGIDGTYLKITRAIYDKPTA NILINGQKLEAFPLKTGTRQGC LSPLLFNIVLEVLAQAIRQEKEI KGIQLGKEEVKLSLFADDMIL LENPIVSAQKLLKLISNVSKVSV YKINVQKSQAFLYTINRQTES IMSEPPTHATKRIKYLGIQLTRI VKDLFKKYKPLLNKIKEDTNK WKNIACSWIGRINIMKMAFPR WELNNENTWTQEGEHHTLGP VGWGKRGGIALVDIPNVNDKL WVLEVLARAIRQKKEIKGIQLG KEEVKLSLFADDMIVYLENSIV SAQNLKLISNFSKVSGYKINVQ KSQAFLYTINRQTESQIMSEPP FTIATKRIKYLGIQLTRDVKDLI KENYKPLLKEIREDTNKWKNII CSRIGRINIMKMAILPKUYJRFN | | | |
| | | | | | | CSNIGNINIMMANI-PA' IT REP DIPIKLPMTFFTELEKTTLKFIW NORRACIAKTILSKKNIAGGIT POFELLYYKATVTKTAWYWYC NRDIDQWNRTEASEVTSHIYN LIFYKPDKNKKWGNDSLFINK WENWLAICREKLIKLDPFLTPY KIHSRWIKDLNYRPKTIKTLEE LGNTIQDIGMGKDFMTKTPKA MATKAKVDKWDVIKLKSFCT. | | | |
| 4222 | 24500 | | 4262 | | 1000 | KETTIRVSRQPTEWEKIFAIYPS DKGLISRIYKELKQIYRKK\TM PIKKWAKNMNRHFSKEDIYAA NRQMKKCSSSLVIREMQIKTT) | | | |
| 4222 | 34590 | A | 4263 | 1 | 1989 | | | | |
| 4223 | 34591 | A | 4264 | 1 | 1104 | | | | |
| 4224 | 34592 | A | 4265 | 1 | 879 | | | | |
| 4225 | 34593 | A | 4266 | 1 | 1659 | | | | |
| 4226 | 34594 | В | 4267 | 1 | 1500 | | | | |
| 4227 | 34595 | В | 4268 | I | 1962 | | | | |
| 4228 | 34596 | В | 4269 | 1 | 1716 | | | | |
| 4229 | 34597 | Α | 4270 | 1 | 1152 | | | | |
| 4230 | 34598 | Α | 4271 | 1 | 4752 | | | | |
| 4231 | 34599 | A | 4272 | 1 | 2790 | | | | |
| 4232 | 34600 | Α | 4273 | 1 | 3477 | | | | |

| SEQ ID NO: | SEQ ID NO: of peptide sequence | | SEQ ID NO: in USSN 09/540,217 | Nucleotide location of first codon for peptide sequence | Nucleotide location of last codon for last amino acid of peptide sequence | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
|---------------|--------------------------------------|----|-------------------------------------|--|---|---|
| 4233 | 34601 | Α | 4274 | ı | 1007 | MLDASCHRTSDSKFFSFGVQTG |
| | 1 | | | | | FLTPELAHLVGPCDRDHNSSPA |
| | | | | | | REQNWTENEFDELTEVGFRKW |
| | | | | | | VITNSSELKEHVLTQSKEAKNL |
| | | 1 | | 1 | | EKRAIKQEKEIKGIQLGKEEVK |
| | 1 | | | | | LSLFADDMIVYLENPIVSAQNL |
| | 1 | | | | | LKLISKFSKVSGYKINVQKSQA |
| | 1 | | | ŀ | | LLYTNNR\SQIMSELPFTIAMKR |
| | | 1 | | | | IKYLGIQLTRDVKDLFKDNYKP |
| | | | | | | LLKEIREDTNKWKNIPCSWLGR |
| | | | | | | INIMKMAILPKAIYRFNAIPIKLL |
| | | 1 | 1 | | | *TFFTELEKTTLNFIWNQKRARI |
| | İ | i | | | | AKTILSKKNKAGGITLPDFKLY |
| | ŀ | | | | | HKATVTKTAWYWYQNRYIDQ |
| | | | | | | WNRTEASEITPHIYNHLIFDKPE |
| 4234 | 34602 | Α | 4275 | 737 | 2460 | RIKYLRIQLTRDVKDLFKENYK |
| ļ | | | | | | SLLNEIKEDTNKWKNIPCSWIG |
| | | | i | | 1 | RMNIIKMAI/LPKVIYRFNVIPIK |
| | | | | | | LPMTFFSELEKSTLKFIWNQKR |
| | | | | | | ARIAKTILSQKNKAGGIMLPDF |
| | | | | | | KLYYKATVTKTAWYWYQNRD |
| | | | | | | IDQWNRTEPSEMTPHIYNHLIFD |
| | | | | | | KPDKNKQWGKDSLFNKWCWE |
| | | | | | | NWLAIGRQLKLDPFLTPYTKIN |
| | | | | | | SRWIKDLNVRPKTIKTLEENLG |
| 1 | | ļ. | | | | NTIQDISMGKDFMSKTPKAMA |
| | | | | | | TKAKMDKWDLIKLKSFCTAKE |
| i | | 1 | | | | TTIRVNRQPTEWEKNFAIYSSD |
| | 1 | | | | | KGLISRIYKQLKQIYKKKTNNPI |
| | | | | | | KKWAKDMNRHFSKEDVYAAN |
| | | | | | | RHMKKCSSSLAIREMQIKTIMIY |
| | | | | | | HLTPVTMAIIKKSGNNRCWRG |
| | | | | | | CGEMGTLLYCWWDCKLVQPL |
| | | | | | | WKTLWQFLRDLELGIPFDPAIP |
| | | | | | | LLGIYPKDYKSCCYKDTCTPKL |
| | | | | | | ARDDQIHILKQHRRKELETRQK |
| | | | | | | QYRAWYEINPFHSVWPVTAGK |
| | | | | | | SPRHQLPVWVHNPQTSPYLQL |
| | | l | , | | | QTRDGEESNENNFGSTILASDFF |
| | | | | | | AEIDKLSILQIHMEMEGTQNSQ |
| | 1 | | | ļ | | NNLDKKKTKMEDLHFSISKLLH |
| 1225 | 34603 | _ | 4276 | 3 | 355 | SYSIQDNVISA |
| 4235 | 34603 | Α | 42/6 | ľ | 333 | RQPVHLVHELPQQSWGICLNSS |
| | | | | | | EQHGALQHSSLHL/RMCSEPWS |
| 1 | | | | | | SADPQ*R*TCRNL*LPVRGPPRR |
| 1 | | | | | | TDLFSVSSKSTLKEWPLLLMIL |
| l | | | | | | AELGSYLILSGRREESYFTSLVL |
| 4226 | 24604 | В | 4222 | 70 | 701 | ISIGDC |
| 4236 | 34604 | IR | 4277 | 78 | 791 | |

| SEQ ID NO: | SEQ ID NO: of peptide sequence | | SEQ ID NO: in USSN 09/540,217 | Nucleotide location of first codon for peptide sequence | Nucleotide location of fast codon for last amino acid of peptide sequence | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
|---------------|--------------------------------------|---|-------------------------------------|--|---|--|
| 4237 | 34605 | A | 4278 | | 3395 | MIISIDTENAFEKIQQFFMLKTL NKLGIDGTYLKIIRAIYDKPTAN ILLIGOKYLEAPPLKTGTRQGCPI SPLLENIVLEVMARVIRQEKEKI GOLGKEEVKLSLFVDDMIVYL ENPIVSAQNILKLISNLSKVSGY KINVQKSQAFSYTNNRQTESQI MNGQLPTTASKRIKYLGIQLTR DVKELEKENYKPLLNEKKVDT NKWKNIPCSWIGRINILKMAIL PIKELEKTILKFIWNQKRACIAK SILSKKNKAGGITLPDFKLYYK ATVTKTAWYVQNRDIDOWN RTEPSEIIPHIYNHLIFDKPDKN KKWGMGSLFNKWCWENWLAI CORKLKLDPFLTPYTKINSRW LINVERSTRIKTLEENLGNTIQDI DMGKDPMSKTPKAMATKAKII KWDLTKLRSFCTAKETITRVNR QPKEWEKIFAIVSSKGLISRIY KELKRIYK/KKNNPIKKWAKD MNSYAFKEDIYAANRHMKKOS MSNAFKEMQIKTHNENTWIKCS MAIIKKSGNNRWEMNNENTWI QEGEHHTLG/HC/WWARARSKS MAIIKKSGNNRWEMNNENTWI QEGEHHTLG/HC/WWARARSKS KELTRYMRARMENNENTWI QEGEHHTLG/HC/WWARARSKS |
| 4238 | 34606 | В | 4279 | 1 | 2011 | CO |

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| SEQ ID | | | SEQ ID NO: | | | Amino acid sequence (X=Unknown, |
|--------|------------------------|-----|-----------------------|--|--|---|
| NO: | of peptide sequence | hod | in USSN 09/540,217 | location of first codon for peptide | codon for last amino acid of peptide sequence | *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
| | sequence | | 09/340,217 | sequence | or pepude sequence | deterion, (-possible intercorde insertion) |
| ŀ | | | | | | |
| 4239 | 34607 | Α | 4280 | Ī | 2661 | MTMNFVADSHTGRNPLASAAG |
| | | | | | | AKTGLRPLPRPCGARVWNPPD |
| | | | | | | AGGGGVGSLKTSTPLGPLSAAN |
| | | | | | | SPVHQGSVPQTRARGGGTLFQE |
| | | | | | | VVTSRTLAFRNSLSAFTEVTSG |
| | | | | | | TVSGRKGGRSTHLAGRRVSGG |
| | | | | | | EGSRKAAAAALAAVAAAPGPV |
| | İ | | | | | RRCSSQSCFSSSGSSHYSARTSP |
| | j | | | | | VRVRPRRSLSSRSAAGNRAEAT |
| | 1 | | | | | ESAMEKTLETVPLERKKREKEQ |
| | | | | | | FRKLFIGGLSFETTEESLRNYYE |
| | | | | | | QWGKLTDCVVMRDPASKRSRG |
| | ļ. | | | | | FGFVTFSSMAEVDAAMAARPH |
| | | | | | | SIDGRVVEPKRAVAREESGKPG |
| | | | 1 | | | AHVTVKKLFVGGIKEDTEEHHL |
| | | | | | | RDYFEEYGKIDTIEIITDRQSGK |
| | | | | | | KRGFGFVTFDDHDPVDKIVLQK |
| | | | | | | YHTINGHNAEVRKALSRQEMQ |
| | | | | | | EVQSSRSGRGDGYGSGRGFGD |
| | | | | l | | GYNGYGGGPGGGNFGGSPGYG |
| | | | | | | GGRGGYGGGGPGYGNQGGGY |
| | | | | | | GGGYDNYGGGNYGSGNYNDF |
| | | l | | | | GNYNQQPSNYGPMKSGNFGGS |
| | | | | | | RNMGGPYGGGIWKNTSITERK |
| | | | | | | KSRKLDLIQSKKGSRTKEAPQP |
| i | | | | | | PVASLCMHLGHWSRLMVSPGA |
| | | | l | | | QLTGKNSHGLSVSSVRKSNVGP |
| | | | | | | RRLCAAMKATGPDNAQSQVSP |
| | | | l | | | PGHAPSAEDPTGSRTVSSPCTD |
| | ļ | | | | | RPHPFLSRPKPPTQISLVLPLKT |
| | | | | | | DGALERMPQQL/HIASS/GAKVP |
| | | | | | | NPSTQTPPVLLAFFYPFNLPP*N |
| 4240 | 34608 | Α | 4281 | I | 908 | MRKVKGKNRQSFKCLPPPSGA |
| | | | | | | LQAHGAAAPHGSLLTLHLHLV |
| | | | | | | PVSSAAMKATGPDNAQSQVSP |
| | | | 1 | | | PGHAPSAEDPTGSRTVSSPCED |
| | | | 1 | | | RPHPFLSWPTWISLALLLKTDG |
| | | ļ. | 1 | | | ALERMPQQLPSLHPSQGTQSIH |
| | | | | | | PDPSSTSSFLLPFQPPTLKRAAFP |
| | | | | | | CPPSIVNPAVWDTSTPSVAEHH |
| i | | | | | | TPIRITLKEPTQFLSQKQYPIPQA |
| | | | | | | ALVGLQPIISHLLASHLLRPTDS |
| | | | | | | PFNTPILPVKKPNGTYRLVQDL |
| | | | | | | RLINQAVLPLVQE/DYSVLLYLP |
| | | | | | | LNVTPGLPPATAFSYPPSPGPVA |
| | | | | | | RARLASRLHSHAA |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nuclcotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \-possible nucleotide insertion) |
| | | | | l dicace | | |
| 4241 | 34609 | Α | 4282 | I | 915 | MPNYVTFTDTKQLISDTPNNQV |
| | | | | | | PMNRASMAFDAKCLTGCRFDD |
| | | | | | | AIVQFDMTYWPFTVVNDAGRP |
| | | 1 | | • | | KVQVEYERDKKLLPIGGVFYGS |
| | | | | | | DKDEGNCKSLPWEDCYQCCET |
| | | | | i | | SQNVQDFLFLDVTPLSLDIKTA |
| | į. | l | | | | DGVMAVLIKCDATIPTRQTQTF |
| | ł | | | | | TTYSDKPSM/LIAKDKNLLRKFE |
| | 1 | | | | | LTGVPPAHHGAHQIEVTFDINA |
| | | | | | | KGILNV\TLTDDKGHLSKEDIEP |
| | | | | | | MVQETEKYKAEDEKQRDKVSS |
| | | | | | | KNSLDPYVFNMKATAEDEKLQ |
| | 1 | | | 1 | | VKINNEHKQKILSKCHEIINWL |
| i | | ŀ | | l | | DKNQTAEKEEFEHAQQELEKSS |
| 4242 | 34610 | Α | 4283 | 1 | 994 | MHQTKKGNQWHFGMKAHIGV |
| | | 1 | | | | DAKSGLTHSLVTTRPNEHDLNQ |
| | | | | | | LGNLLHGEEQFVSADAGYQGA |
| | | 1 | | | | PQREELAEVDVDWLIAERPGK |
| | i | | | | | VRTLKQHPRKNKTAINIEYMKA |
| | l . | 1 | | | | SIRARVEHPFRIIKRQFGFVKAR |
| | l | | | | | YKGLLKNDNQLAMLFTLANLF |
| | i | | | | | RADQMIHCTRGEGLITTKIPKAP |
| | | | | | | DNGSYCLPSKNDDSEEEDPEMS |
| ĺ | | 1 | | | | PMVVTKMKEIAEAYLGKTVTN |
| | | | | | | AVLTVPAYFNDSQRQAT/KKDA |
| | | | | | | RTIAGLNGLRISNEPTAAAIAYG |
| | | 1 | | | | LNQKVGTERNVLIFDLGGSITPR |
| | 1 | 1 | | | | IRTPETGSDDAIKSILEQAKKEIE |
| | | L., | | | | SQKGGECDPCRQSLRPPGPAAN |
| 4243 | 34611 | A | 4284 | 3 | 677 | |
| 4244 | 34612 | A | 4285 | 30 | 365 | EEAETVLVGQLKQLSSCLAVH |
| | | | 1 | | | KYRPETKQEKKQRLLARAEKK |
| | | | | | | AAGKGDVPTKRPPVLRAGVNT |
| | | | | | | VTTLVENKKAQLV\CRKMGVP |
| | | | ĺ | | | YCIIKGKARLGRLVHRKTCTTV |
| | | | | | | AFTQVN |
| 4245 | 34613 | A | 4286 | 3 | 432 | NSRVDDFVAAQDAKGKKVAP |
| | | | | l | | APAVVKKQEAKKVVNPLFEKR |
| | 1 | 1 | | | 1 | PKNFGIGQ\QRLLARAEKKAAG |
| | | 1 | | 1 | | KGDVPTKRPPVLRAGVNTVTT |
| | | | | | | LVENKKAQLVVIAHDVDPIELV |
| | | 1 | | 1 | | VFLPALCRKMGVPYCIIKGKAR |
| | | | | | | LGRLVHRKTCTTVAFT |
| 4246 | 34614 | C | 4287 | 62 | 217 | |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | | | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------------------|---------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 4247 | 34615 | Α | 4288 | 2 | 801 | PKGKKAKGKKVAPAPAVVKK |
| | | | | | | QEAKKVVNPLFEKRPKNFGIGQ |
| | | | | | | DIQPKRDLTRFVKWPRYIRLQR |
| | | | | | | QRAILYKRLKVPPAINQFTQAL |
| | | | | | | DRQTATQLLKLAHKYRPETKQ |
| | | | | | | EKKQRLLARAEKKAAGKGDVP |
| | | | | | | TKRPPVLRAGVNTVTTLVENK |
| l | | | | | | KAQLVVIAHDVDPIELVVFLPA |
| | | | | | | L\CRKMGVP\YCIIKGKARLGRL |
| | į. | l | | | | VHRKTCTT\VAFTQVNSEDKG\ |
| | | | | | | ALAKLVEAIRTNYNDRYDEIRR |
| | | | | | | HWGGNDLRPK\SVARIAKLEKA |
| | 1 | | | | | KAKELATKLG |
| 4248 | 34616 | В | 4289 | 1 | 273 | |
| 4249 | 34617 | Α | 4290 | 1 | 441 | |
| 4250 | 34618 | В | 4291 | 47 | 482 | |
| 4251 | 34619 | Α | 4292 | 1 | 762 | |
| 4252 | 34620 | A | 4293 | 1 | 890 | MSKSESPKEPEQLRKLFIGGLSF |
| | | | | | | ETTDESLRSHFEQWGTLTDCVV |
| | | l | | | | MRDPNTKRSRGFGFVTYATVE |
| | | l | | | | EVDAAMNARPHKVDGRVVEP |
| | | | | | | KRAVSREDSQRPDYFEQYGKIE |
| | | | | | | VIEIMTDRGSGKKRGFAFVTFD |
| | | l | | | | DHDSVDKTVIQKYHTVNGHNC |
| | | | | | | EVRKALSKQEMASASSSQRGRS |
| | | l | | | | GSGNFGGGRGGGFGGNDNFGR |
| | | l | ١. | | | GGNFSGRGGFGGSHGGGGYGG |
| | į. | | | | | SGDGYNGFGNDGSNFGGGGSY |
| | | l | | | | NDFGNYNNQSSNFGPMKGGNF |
| | | l | | | | GGRSSGPYGGGGQYFAKPRNQ/ |
| | | | | | | GGYGGSSSSSSYGSGRRF |
| 4253 | 34621 | Α | 4294 | t | 1674 | |
| 4254 | 34622 | Α | 4295 | 1 | 506 | KYHTVNGHNCEVRKALSKQEI |
| | | | | | | ASASCSQRGRSGSGNFGGDRG |
| | | | | | | GGFGGNDNFGRGGNFSGHGGF |
| l | | 1 | | | | GGSCCGGGYGGSGDGYNGFGN |
| | | | | | | DASNFGGGGS/YNEFG/NYNNQ |
| | | | | | | SSHFGPLS/GGNFGGRSS/SPLGG |
| | | | | | | APASTYVKGPNSQRTQNEGWF |
| 1 | 1 | 1 | 1 | I | | EG*APWRGDGGARGNKGGGA |

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| | SEQ ID NO: | | | | | Amino acid sequence (X=Unknown, |
|-------|------------|-----|------------|-------------------|---------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| 1 | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \-possible nucleotide insertion) |
| | | | | sequence | | |
| 4255 | 34623 | Α | 4296 | 1 | 1445 | MKCLKFINHKEILEASERKQAE |
| | | | | | | SLDFPFKKLRWHLCEGWIEEER |
| | | | | | | DESRKSETIFKDLFKVPVLKETI |
| | | | | | | YYKFYGPPVYQIETVYFMALSP |
| | | | | | | PKSKQFDKTKQNNNNKKTHQF |
| | | | | | | VIVFFKTDEHLSARGRRRRSIVK |
| 1 | | | | | | VSLLPAVIGLKSKFLKKPDOLR |
| | | | | | | KLFI\GG\LSFETT\DESLEEPFSR |
| İ | | | | ļ | | OWGKRYTDSVVMRDPNTKRSR |
| | | | | | | G\FGFVTYAT\VEEVDAA\MNA |
| | * | | | | · · | RPHKVEWKELLEPKRA\VSRED |
| İ | | | | | | SORPGCPH*LVKK1FVGGIKEDT |
| | | | | | | EEHHLRDYFEQYGKIEVIEIMT |
| | | | | İ | | D\RGSGKKRGFAF\VTFD\DHD\S |
| | | | | | | VDKIVI\QKYHTVNG\HN\CEV* |
| | 1 | | | | , | KSPVKSKKMASASSKPKEGRSG |
| | | | | | | FWETFGGGSWEVGFGGN\DNF |
| | | | | | | GRG\GNFSWSVVAFGGSRG\GG |
| | | 1 | ŀ | | | GYG\GSGDG\YNGFGNDG\SNF |
| | | | | | | G\GGG\SYNDFG\NYNNO\SSNF |
| | | | i | | | GPMKGG\NFG\GRSSGPYG\GGG |
| | | | i | | | OYF\AKPR\NOGGYGGSSSS\SN |
| 4256 | 34624 | A | 4297 | 1 | 920 | DPGDTPNTASAPNCRSGKGRSS |
| 1.200 | | | | | | SPEHIPPLEKLEDSMOTNPSTNP |
| į . | | l | | | | EPGRLAEWLDPEERQOSLOFGL |
| | l | | | | | QEATSIGKGGQYYIKGTPHGTK |
| | | Į. | | | | ESEQQPSALDLPSDRAYPNEKE |
| | | 1 | | | | PENOLWRLVIKLIKEAPEKGAY |
| | | 1 | | | | LNVIKAVYDKPTNGEKLRAFPL |
| | | | | | | RTGTKHRCPLSPLLFNILLEVLA |
| | | | | | | RAIROEKEIKSIOIGKEEVKLSLF |
| | | | ĺ | | | ADDIIIYLESPKYSSRKLQELIKE |
| | | | | | l | FSKVSRYEINVHKSVALLYT\NS |
| | | | i | | | NQAENQIKNSASFTIAAKNKIK |
| | | | | | | YLGIYLTKDAKDGYKENYKTL |
| | | | | | | MKEIIDDKNKQKYIP |
| 4257 | 34625 | Α | 4298 | 1 | 1194 | |
| 4258 | 34626 | Α | 4299 | 3 | 1834 | |
| 4259 | 34627 | Α | 4300 | 285 | 502 | |
| 4260 | 34628 | В | 4301 | 77 | 1306 | |
| 4261 | 34629 | Α | 4302 | I | 354 | |
| 4262 | 34630 | A | 4303 | 1 | 1182 | |
| 4263 | 34631 | В | 4304 | 1 | 1995 | |
| 4264 | 34632 | В | 4305 | 1 | 1518 | L |

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| SEQ ID NO: | SEQ ID NO: of peptide sequence | | SEQ ID NO: in USSN 09/540,217 | Nucleotide location of first codon for peptide sequence | Nucleotide location of last codon for last amino acid of peptide sequence | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleatide deletion, \=possible nucleatide insertion) |
|---------------|--------------------------------------|---|-------------------------------------|--|---|---|
| 4265 | 34633 | A | 4306 | ī | 918 | MCPVGPWTHPVVISPVSECIVGI DILGSWQNLHIGSLTDITMYHYI DDMMLIGSSEQVANSLDLLV RHLHARGCKINPIKIQGTSTSV KFLEFQWCGVCQDIPSKWVLE QKALQQVQAAVQAALPLEPYD PADPMVLEVSVADGVAVWSL UVQAPIARIHGSRNQGVEVEVSP LTNIPSDPLAKFLFPAPSTLCSA GLELLYPEGGTLLPGNTTMIPL NWKLRLVPGYFGLLLALSPQA KNGVTVLAEVIDPDYQDEITLL FINGGGEEYARNTGDPLRHILL FINGGGEEYARNTGDPLRHILL VLPSPMIKNGKUQHPNPGRT |
| 4266 | 34634 | В | 4307 | 1 | 1599 | |
| 4267 | 34635 | В | 4308 | 1 | 1569 | |
| 4268 | 34636 | A | 4309 | 3 | 422 | |
| 4269 | 34637 | Α | 4310 | 1 | 1089 | |
| 4270 | 34638 | A | 4311 | 2 | 549 | LKMTAMQRPMEKRMMNREIIL KERLSLTGIDIKILKKRSIMKVE SINGEQISVSSLALQRIKYVLGIQI TRDVKDLFKENYKPLLNKLKE DTNKWRNYPCPROGRISIVKM ALIPKILKKKTTLKFIWNQKRA HIAKTILSKKNKAGGITLPDFKL YYKAT/KTAWCWYQNRDTDQ WNRTKPSEI |

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| SEQ ID | | | SEQ ID NO: | | | Amino acid sequence (X=Unknown, |
|--------|------------------------|-----|-----------------------|--|--|---|
| NO: | of peptide sequence | hod | in USSN 09/540,217 | location of first codon for peptide | codon for last amino acid of peptide sequence | *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
| | sequence | | 03/340,217 | sequence | or peptide sequence | deterion, (~possione merconde maer tion) |
| 4271 | 124620 | ļ. | 4312 | 371 | 3036 | LIAYOPKKVQDQMDSQPNSTR |
| 4271 | 34639 | Α | 4312 | 3/1 | 3036 | VLEVLARAIROEKEIKGIOLGK/ |
| | | | | | 1 | EEVKLSMFADDITAYLENPIVS |
| | | | 1 | | | |
| | | | 1 | 1 | | APNLLKLISNFSK/VSGYKINVQ |
| 1 | | | | l | 1 | KSQAFLYTNKRQTE\QIMSELPF |
| | | ŀ | 1 | | l | TVASKRIKYLGIKLRRDVKDLF |
| l | | | l | | ŀ | KENYKPLLNEIKEDTNKWKNIP |
| | | ŀ | | l | | CSWIGRINIVKMTILPKVIYRFN |
| 1 | | ŀ | l | | | AIPIKLPMTFFAELEKTTLKFIW |
| | | | l | l | l . | NQKRAHIAKTILSQKNKAGGIM |
| | | | l | l | 1 | LPDFKLYYKATVTKTAWYWY |
| | ľ | 1 | | | | QNRDIDQWNRIEPSEIIPHICKH |
| | | | | | | LIFDKPDKNKKWGKDSLFNKW |
| | | ŀ | | | | CWENWLAICRKLHLDPFLTPYT |
| | | 1 | | | | KINSRWIKDLNVRHKTIKTLEE |
| | | l | l | | i | NLGNTIQDIGMGKDFMTKTPK |
| | 1 | l | l | | | AMATKAKIDKWDLIKLKSFCT |
| | | 1 | | | | AKETTIRVNRQPTEWEKIFATY |
| 1 | | 1 | | | 1 | SSDKGLISRIYNELKQIYKKKTN |
| | | 1 | | | | NPIKKWAKDMNRHFSKEDIYA |
| | | | | | | AKKHMKKCSSSLAIRETLYNDR |
| | | | ŀ | | | RIGKLTQTCDETAFQPHVCTISR |
| | | l | | l | | PMLSSPYRSSLTEKWSQDFSKP |
| | | l | | | | PYPFLFHKGYLNPREQDKEVLT |
| | | 1 | ł | | | RAIRQEKERKGIQLGKEEVKLS |
| | | 1 | İ | | | LFADDMIVYLENPIVSAQNPLK |
| | | | | | | VVSNFSKVSGYKISVQKSQAFL |
| | | | | | | YTNNRQTESQIMSELPFTIASKR |
| | | | l | l | | IKYLRIQLTRDVKDLFKENCKP |
| | | | l | | | LLNEIEEDTNKWKNIPCSWIGRI |
| | | | | | | NIVKMAILPKVIYRFNAIPIKLP |
| | | _ | | | | MTFFTVLEKTTLKFIWNQKRAH |
| 4272 | 34640 | В | 4313 | 1 | 1995 | |
| 4273 | 34641 | A | 4314 | 3 | 549 614 | FAVOOTECTCOCTETI DODUT |
| 4274 | 34642 | ΙΑ. | 4313 | ľ | 014 | EAYGQTECTGGCTFTLPGDWT |
| 1 | | | l | | | S\GQFINILEMCLELSPCKSFSAD |
| 1 | | | 1 | 1 | | SARYVLGHVGVPLACNYVKLE |
| | | ŀ | | | | DVADMNYFTVNNEGEVCIKGT |
| | | | 1 | | | NVFKGYLKDPEKTQEAL\DSDG |
| | | l | | | | WLHTGDIGRWLPDIENHNRLIV |
| İ | | 1 | | | | CTLTNTSWRSHKIIVLKTYQKA |
| | | | | l | | DDTKTPKETTFQNIMNLFLKEK |
| | | l | | | | RATAVLIRGGVGETSTDLSKKK |
| 1075 | 24642 | L. | 1216 | l.—— | 170 | PAKLLANF |
| 4275 | 34643 | Α | 4316 | l' | 478 | MKLDLHLSPYTKINSRWIKDLN |
| 1 | | 1 | | l | | LRPETIKILEDIIRKTLLDIGLGK |
| | l | l | | | | DFMIKNPKVNATKTKINKWDLI |
| | | 1 | | | | KLK\NFCTAKEISSREIREPTEW |
| | | | | | | EKIFANSASDKGLISRIYKELKQ |
| | | 1 | | | | IRSTLQLLFGISELPASLFLGFGA |
| | | L | L | | | IMKSKKASLNTSTAILRQLIW |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X-Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | |
| | sequence | 1 | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 4276 | 34644 | A | 4317 | 1 | 1125 | MCHGIGAQIIPSHQTVQLDITAF |
| | | 1 | | | | LKTVKKNKHKFYPAFIHILARL |
| | | | | l . | | MNAHPEFRMAMKDGFIENMFF |
| | | | | | | VSANPWVSFTSFDLNVANMDN |
| | 1 | | | | | FFAPVFTMGKYYTQGDKVLMP |
| | | | | | | LAIGGPLESPDRDGGPLESTNR |
| | l | | | | | DASPESWSCRKSTPRLVAWVS |
| | | | | | | AAKVFIRDKLMERRNRRTGRT |
| | i | | | | | EKARIWEVTDRTVRTWIGEAV |
| | | | | | | AAAAADGGGFRVDLARRSIRK |
| | | | | | | DRNARSQNPVHTEGDMNMNIK |
| | İ | | | | | KIVKQATVLTFTTAFLAGGATQ |
| | | | | | } | AFAKENNQKAYKETYGVSHIT |
| | | | | | | RHDMLQIPKQQQNEKYQVPQF |
| | | | | 1 | | DQSTIKNIESAKGLDVWDSWPL |
| | | | | | | QNADGTVAEYNGYHVVFALA |
| | | | | | | GSPKDADDTSIYMFYQKVGDN |
| | | | | | | SID\SWKNAGRVF |
| 4277 | 34645 | В | 4318 | 1 | 1374 | |
| 4278 | 34646 | A | 4319 | 1 | 1293 | |
| 4279 | 34647 | A | 4320 | 1 | 1278 | MNMNIKKIVKQATVLTFTTALL |
| 4280 | 34648 | Α | 4321 | l' | 1254 | AGGATOAFAKENNOKAYKETY |
| | j | | | 1 | | GVSHITRHDMLQIPKQQQNEKY |
| | | | | | | OVPOFDOSTIKNIESAKGLDVW |
| | | | | | | DSWPLQNADGTVAEYNGYHV |
| | | ł | | | | VFALAGSPKDADDTSIYMFYO |
| | | 1 | | | | KVGDNSIDSWKNAGRVFKDSD |
| | | 1 | | ĺ | | KFDANDPILKDQTQEWSGSATF |
| | 1 | | | | | TSDGKIRLFYTDYSGKHYGKOS |
| | | | | | | LTTAOVNVSKSDDTLKINGV\N |
| | | | | - | 1 | GYYCEES\LFNKA\YYGGGTNFF |
| | | | | | | RKESOKLOOSAKKRDAELANG |
| | | | | | | ALGIIELNNDYTLKKVMKPLITS |
| | | | | | | NTVTDEIERANVFKMNGKWYL |
| | | | | | | FTDSRGSKMTIDGINSNDIYML |
| 1 | | | 1 | | | GYVSNSLTGPYKPLNKTGLVLO |
| | | 1 | l | l | | MGLDPNDVTFTYSHFAVPOAK |
| | | | | | | GNNVVITSYMTNRGFFEDKKA |
| 1 | | | | l | | TFAPSFLMNIKGNKTSVVKNSIL |
| | | | | | | EOGOLTVN |
| 4281 | 34649 | A | 4322 | 1 | 726 | |
| 4282 | 34650 | Α | 4323 | 1 | 1050 | |
| | | | | | | |

474

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | | Amino acid sequence (X-Unknown, |
|--------------|----------------|--------|------------|-------------------------------|---------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 4283 | 34651 | A | 4324 | 1 | 1185 | MNMNIKKIVKQATVLTFTTALI |
| | | | | | | AGGATQAFAKENNQKAYKETY |
| | | | | | | GVSHITRHDMLQIPKQQQNEKY |
| ł | | | | | | QVPQFDQSTIKNIESAKGLDVW |
| | | l | | | | DSWPLONADGTVAEYNGYHV |
| | | | | | | VFALAGSPKDADDTSIYMFYO |
| | | | | | | KVGDNSIDSWKNAGRVFKDSD |
| | | 1 | | | | KFDANDPILKDQTQEWSGSATF |
| | | 1 | | | | TSDGKIRLFYTDYSGKHYGKOS |
| | 1 | 1 | | | | LTTAQVNVSKSDDTLKINGVED |
| 1 | | i | | | | HKTIFDGDGKTYQNVQQFIDEG |
| | 1 | l | | | | NYTSGDNHTLRDPHYVEDKGH |
| | | | | | | KYLVFEANTGTENGYQGEESLF |
| | | | | | | NKAYYGGGTNFFRKESQKLQQ |
| | | | | | | SAKKRDAELANGALGIIELNND |
| | | | | | | YT\LKKVMKPLITSN/TVPQAKG |
| | | l | | | | NNVVITSYMTNRGFFEDKKATF |
| i | | İ | | | 1 | APSFLMNIKGNKTSVVKNSILE |
| | | l | | | | QGQLTVN |
| 4284 | 34652 | В | 4325 | I | 867 | |
| 4285 | 34653 | Α | 4326 | 1 | 495 | |
| 4286 | 34654 | Α | 4327 | 3 | 1394 | GDMNMNIKKIVKQATVLTFTT |
| | | | | | ł | A/LLAGGATQAFAKENNQKAY |
| | | | | i | | KETYGVSHITRHDMLQIPKQQQ |
| | | | | | | NEKYQVPQFDQSTIKNIESAKG |
| | ł | | | | | LDVWDSWPLQNADGTVAEYN |
| | | | | | | GYHVVFALAGSPKDADDTSIY |
| | | | | | | MFYQKVGDNSIDSWKNAGRVF |
| | | | | | | KDSDKFDANDPILKDQTQEWS |
| | 1 | | | | | GSATFTSDGKIRLFYTDYSGKH |
| | | | | | | YGKQSLTTAQVNVSKSDDTLKI |
| | | | | | | NGVEDHKTIFDGDGKTYQNVQ |
| | | | | | | QFIDEGNYTGDPLEAETAVINH |
| | | 1 | | | | KKRKNSPRIVQSNDLTEAAYSL |
| | | 1 | | | | SRDQKRMLYLFVDQIRKSDGTL |
| | | 1 | | | | QEHDGICEIHVAKYAEIFGLTSA |
| | | 1 | | l | | EASKDIRQALKSFAGKEVVFYR |
| | | 1 | | | | PEEDAGDEKGYESFPWFIKRAH |
| | l | l | | | | SPSRGLYSVHINPYLIPFFIGLQN |
| | | l | 1 | 1 | | RFTQFRLSETKEITNPYAMRLY |
| | | 1 | | | | ESLCQYRKPDGSGIVSLKIDWII |
| | | | 1 | 1 | | ERYQLPQSYQRTPDFRRRFLQV |
| | L | _ | L | | | CVNEING |
| 4287 | 34655 | В | 4328 | 9 | 1004 | |
| 4288 4289 | 34656 | A | 4329 | 1 | 768 | |
| 4289 | 34657 34658 | A B | 4330 - | 58 | 1308 753 | |
| 4290 | 34658 | В | 4331 | 138 | 409 | |
| 4291 | 34660 | В | 4333 | 1 | 921 | |
| 4292 | 34661 | A | 4334 | i | 1026 | |
| 4294 | 34662 | В | 4335 | li | 945 | |
| 7657 | 13-1002 | ľ | 1777 | <u>ı.</u> | J-10 | |

| SEQ ID NO: | SEQ ID NO: of peptide sequence | | SEQ ID NO: in USSN 09/540,217 | Nucleotide location of first codon for peptide sequence | Nucleotide location of last codon for last amino acid of peptide sequence | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
|---------------|--------------------------------------|---|-------------------------------------|--|---|--|
| 4295 | 34663 | A | 4336 | | 528 | MNMNIKKIVKQATVLTFTTALL AGGATQAFAKENNQKAYKETY GVSHITRHDMLQIPKQQQNEKY QVPQPDQSTIKNIESAKGLDVW DSWPLQNADGTVAEYNGYHV VFALAGSPKDADDTSIYMFYQ KDQTDEWSIGSATFTSDCKIRLF YTDYSGKHYGKQSLDTA\Q*NV VKSG |
| 4296 | 34664 | Α | 4337 | I | 1701 | |
| 4297 | 34665 | В | 4338 | 97 | 1449 | |
| 4298 | 34666 | Α | 4339 | 1 | 1581 | |
| 4299 | 34667 | В | 4340 | 1 | 1539 | |
| 4300 | 34668 | A | 4341 | 87 | 1344 | SLPNI.DNAAICSSSSSPTRTK*S. SEGATOJAFAKEKYPHKHITKKR SGV FHITRHDML.QIPKQQQNEK YQVPGFDGSTIKNIESAKAL.DV WDSWPLQNADGTVAEYNGYH VVFALAGSPKDADDTSIYMFY QKVGDNSIDSWKNAGRYFKDS DKFDANDPILKDQTQEWSGSA TFTSDGKIRLFYTDYSGKHYGK QSLTTAQVNVSKSDDTLKINGV EDHKTIFDGDGKTYQNVQOFID EGNYTSGDNHTLRDPHYVEDK GHK YRGPLESPSTHQAEFNPTS CVSSLGTLQGFPAPAWLALAHP VHPLKHKSGGSNRLSAAIWGIK RKPAR |
| 4301 | 34669 | A | 4342 | 1 | 1713 | |
| 4302 | 34671 | A | 4344 | 3 | 1918 | |
| 4304 | 34672 | Ā | 4345 | 254 | 1118 | RPPAFAKK*PKAYKET/YGVSHI TRHDMILQIPKQQONEKYQVPQ FDOSTIKNIESAKGLDWMDSWP LQNADGTVAEYNGYHYVFALA GSPKDADDTSIYMFYQKVGDIN SIDSWKNAGRVFKDSDKFDAN DPILKDQTQEWSGSATFTSDGK RLFYTDYSGKHYGKQSLTTAQ VNVSKSDDTLKINGVEDHKTIF DGDGKTYQNVQQFIDEGNYTS GDNHTLRDPHYVGGTSWEPGV FSVSCVFFGQQEGV;HG*DEFLD FSYWFQGG*ICLYQKAS*QNTT SYKRYTGS |

| SEO ID | ISEO ID NO: | Met | ISEO ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X-Unknown, |
|--------------|----------------|----------|-------------|-------------------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 4305 | 34673 | A | 4346 | li . | 1952 | MNMNIKKIVKQATVLTFTTALI |
| 1.505 | 15.075 | 1 | 10.0 | 1 | ., | AGGATQAFAKENNQKAYKETY |
| | | 1 | | l | | GVSHITRHDMLQIPKQQQNEK |
| | | 1 | | ŀ | | QVPQFDQSTIKNIESAKGLDVW |
| | | 1 | 1 | | | DSWPLQNADGTVAEYNGYHV |
| İ | | 1 | 1 | ŀ | | VFALAGSPKDADDTSIYMFYO |
| | | 1 | | | | KVGDNSIDSWKNAGRVFKDSD |
| | | | 1 | | | KFDANDPILKDOTOEWSGSATE |
| | 1 | 1 | 1 | ŀ | | TSDGKIRLFYTGSLNSSKTEKY |
| | | 1 | 1 | İ | | OVPHIDOSTIKNIESAKGLDVW |
| | | 1 | 1 | | | DSWPLQNADGTVAEYNGYHV |
| | 1 | | 1 | | i | VFALAGSPKDADDTSIYMFYO |
| ļ | | | 1 | ŀ | | KVGDNSIDSWKNAGRVFKDSD |
| | | 1 | 1 | İ | | KFDANDPILKDQTQEWSGSATE |
| | | 1 | 1 | | | TSDGKIRLFYTDYSGKHYGKQS |
| | | | | i | | LTTAQVNVSKSDDTLKINGVED |
| 1 | | 1 | | | | HKTIFDGDGKTYQNVQQFIDEC |
| ĺ | | ĺ | ł | ĺ | | NYTSGDNHTLRDPHYVEDKGH |
| | | 1 | | | | KYLVFQDHTGTEEHPQPQ\ERP |
| l | | 1 | | l | | RTQSFTSAFAERRECIPNVPADT |
| 1 | | 1 | | i | | KLSKIKTLRLATSYIAYLMDLL |
| | | 1 | | 1 | | AKDDQNGEAEAFKAEIKKTDV |
| | | | | i | | KEEKRKKELASKCLDLEQLGAS |
| | | | | | | VEPTGNLRTKITKEKPRHTGPPE |
| | | | | | | VVVPGCCPHRSRAYKSDKYAH |
| | | | | 1 | | TLTVTASQHAPPPPTHMEGFEL |
| | | 1 | | 1 | | FHLPDLCSPSQDAQTTGRTQMK |
| | | 1 | | | | PDHSPRPSHRVPQAKGNNVVIT |
| l | | | | | | SYMTNRGFFEDKKATFAPSFLM |
| 1206 | 0.168 | <u> </u> | 10.15 | ļ. — | 1000 | NIKGNKTSVVKNSILEQGQLTV |
| 4306 4307 | 34674 34675 | A | 4347 | 276 | 1029 | CVWLGCRGYYPKAYKETY\GV |
| 4307 | 340/3 | ı^ | 4348 | 276 | 11246 | SHITRHDMLOIPKOOONEKYOV |
| ŀ | | 1 | 1 | | | POFDOSTIKNIESAKGLDVWDS |
| 1 | | 1 | | | | WPLQNADGTVAEYNGYHVVF |
| | | 1 | l | | | ALAGSPKDADDTSIYMFYQKV |
| | | ì | | | | GDNSIDSWKNAGRVFKDSDKF |
| | | | l | | | DANDPILKDQTQEWSGSATFTS |
| | | l | ľ | | | DGKIRLFYTDYSGKHYGKQSLT |
| | | | | | | TAQQLLQLVQFQEVDTDFDFPE |
| | | 1 | | | ľ | EDKKEEFEECLEKFFSTGPARPP |
| | | 1 | | | | TKEKVKRRVLIEPGMPLNHIEY |
| | | 1 | | 1 | | CNHEIMGKNVYYKHRWVAEH |
| 1 | | | | | | YFLLMQYDELQKICYNEFVPSV |
| | | 1 | | 1 | | IFLRYKSPGEAAGTCHLKQRRW |
| | | | | | | VMPEAAAPVGTGSRYPLTGQL |
| 4308 | 34676 | A | 4349 | ı | 242 | MNSIQIPKQQQNEKYQVPQFDQ |
| 1 | 1 | [] | | | | STIKYIESPKELDVWDSWPLQN |
| | | | | | | ADGTVAEYNGYHVAFALAG/S |
| | | | | | | PKDADDTSIYMFYQKI |
| 4309 | 34677 | В | 4350 | 1 | 2198 | ``` |
| | | - | | | | |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 4310 | 34678 | Α | 4351 | 1 | 2796 | |
| 4311 | 34679 | Α | 4352 | 2047 | 3531 | |
| 4312 | 34680 | Α | 4353 | 1 | 3336 | |
| 4313 | 34681 | Α | 4354 | 1 | 1409 | MKRAPVIPKHTLNTQPVEDTSL |
| | | 1 | | | | STPAAPMVDSLIARVGVMARG |
| | | 1 | ļ | | | NAITLPVCGRDVKFTLEVLRGD |
| | | l | | | | SVEKTSRVWSGNERDQELLTE |
| | | 1 | | | | DALDDLIPSFLLTGQQTPAFGR |
| | | l | | İ | | RVSGVIEIADGSRRRKAAALTE |
| | | l | | l | | SDYRVLVGELDDEQMAALSRL |
| | | 1 | 1 | | | GGATQAFAKENNQK\AYKETY |
| | | l | 1 | l | | GVSHITRIIDMLQIPKQQQNEKY |
| | | 1 | l | l | | QVPQFDQSTIKNIESAKGLDVW |
| | | l | | | | DSWPLQNADGTVAEYNGYHV |
| | | 1 | 1 | | | VFALAGSPKDADDTSIYMFYQ |
| | | 1 | | | | KVGDNSIDSWKNAGRVFKDSD |
| | | 1 | l | l | | KFDANDPILKDQTQEWSGSATF |
| | İ | 1 | l | | | TSDGKIRLFYTDYSGKHYGKQS |
| | | | | | | LTTAQVNVSKSDDTLKINGVED |
| ŀ | | | | | | HKTIFDGDGKTYQNVQQFIDGY |
| | | | | | | LLEPDGGALQNFQRYTGIQHVH |
| ŀ | | 1 | | ŀ | | RIGMAERMWCDRNRERHTVSS |
| | | | l | | | SGGNRLPNPGPDRSVRHFPDPR |
| | | | İ | l | | FLCPSCATVTPLHELIANKYLSG |
| | | | | | | KIGAKKLRKLLIKHVD |
| 4314 | 34682 | Α | 4355 | 1 | 2316 | |
| 4315 | 34683 | Α | 4356 | 93 | 924 | AQTDAAEKSVSIAQLFQACLSIF |
| | | | | 1 | | SSGDV/AGGATQAFAKENNQK |
| | | ı | | | | AYKETYGVSHITRHDMLQIPKQ |
| | 1 | 1 | | l - | | QQNEKYQVPQFDQSTIKNIESA |
| | | 1 | | l | | KGLDVWDSWPLQNADGTVAE |
| | | | | ! | | YNGYHVVFALAGSPKDADDTS |
| | | 1 | | l | | IYMFYQKVGDNSIDSWKNAGR |
| | | 1 | l | l | 1 | VFKDSDKFDANDPILKDQTQE |
| | | | | l | | WSGSATFTSDGKIRLFYTDYSG |
| | | 1 | l | 1 | | KHYGKQSLTTAQVNVSKSNDT |
| | | 1 | | l | | LKINGVGKYKTIFDGDGKTYQT |
| | | | | 1 | | VQQFIDEGNYTSGGHHTL\KDP |
| | 1 | 1 | 1 | l | 1 | SYNPPLDLSGGNSGYQSQET |

| SEQ ID | | Met | SEQ ID NO: | | | Amino acid sequence (X=Unknown, |
|--------|----------------|-----|--------------|-------------------------------|---------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 1 | | | | sequence | | |
| 4316 | 34684 | A | 4357 | ı | 3118 | MNMNIKKIVKOATVLTFTTALI. |
| 1 | | | | | ĺ | AGGATOAFAKENNOKAYKETY |
| | | | ĺ | | ŀ | GVSHITRHDMLQIPKQQQNEKY |
| | | l | | | | QVPOFDOSTIKNIESAKGLDVW |
| | | l | | | | DSWPLONADGTVAEYNGYHV |
| | | | | ľ | | VFALAGSPKDADDTSIYMFYQ |
| | | | | | | KVGDNSIDSWKNAGRVFKDSD |
| | | | Į. | | | KFDANDPILKDQTQEWSGSATF |
| | | | 1 | | | TSDGKIRLFYTDYSGKHYGKQS |
| | | | ĺ | | | LTTAQVNVSKSDDTLKINGVED |
| 1 | | | 1 | | | HKTIFDGDGKTYQNVQQFIDEG |
| | | l | | | | NYTSGDNHTL\RDP\HYVENKG |
| | | | | | | HKYLGFETNTGTENGYQGEESL |
| | | | | | | FNKAYYGGGTNFFRKESQKLQ |
| | | | | | | QSAKKRDAELANGALGIIELNN |
| 1 | | | | | | DYTLKKVMKPLITSNTVTDEIE |
| | | | | | | RANVFKMNGKWYLFTDSRGSK |
| 1 | | | | | | MTIDGINSNDIYMLGSDESPND |
| 1 | | | | | | FGNRHLHKERLAVYRWHASFI |
| | | | | İ | | CSGNTMPIVLVDWSDIREQKRL |
| | | 1 | | | | MVLRASVALHGRSVTLYEKAF |
| 1 | | | | | | PLSEQCSKKAHDQFLADLASIL |
| 1 | | | | | | PSNTTPLIVSDAGFKVPWYKSV |
| | | | | | i | EKLGWYWLSRVRGKVQYADL |
| | | | | | | GAENWKPISNLHDMSSSHSKTL |
| | | | | | | GYKRLTKSNPISCQILLYKSRSK |
| Ì | | l | | | | GRKNQRSTRTHCHHPSPKIYSA |
| | | | | | | SAKEPWVLATNLPVEIRTPKQL |
| 1 | | | | | | VNIYSKRMQIEETFRDLKSPAY |
| | l | | | | | GLGLRHSRTSSSERFDIMLLIAL |
| 4217 | 24605 | | 4250 | ļ | 1227 | MLQLTCWLAGVHAQKQ |
| 4317 | 34685 34686 | A | 4358 4359 | 2140 | 1326 4390 | |
| 4319 | 34687 | В | 4360 | 1 | 7271 | |
| 4320 | 34688 | A | 4361 | 1 | 1729 | |
| 4321 | 34689 | A | 4362 | 5118 | 5687 | |
| 4322 | 34690 | В | 4363 | 1 | 4726 | |
| 4323 | 34691 | В | 4364 | 1 | 3688 | |
| 4324 | 34692 | A | 4365 | 1 | 1401 | |
| 4325 | 34693 | A | 4366 | 1 . | 1932 | |
| 4326 | 34694 | A | 4367 | 1 | 1407 | |
| 4327 | 34695 | Λ | 4368 | 1 | 1491 | |
| 4328 | 34696 | В | 4369 | 1 | 855 | |
| | | | | | | |

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| SEO ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | ł | 09/540,217 | codon for peptide | of peptide sequence | deletion, \-possible nucleotide insertion) |
| | | | | sequence | | |
| 4329 | 34697 | Α | 4370 | 137 | 1014 | ASEGKOMLRDFVTTRSALKELL |
| 1 | | 1 | | į | | KRALNMARNNQYQPLQKHAK |
| | | | | | | L*RPSML*RNCIN*QPGRDT/TN |
| 1 | | İ | | | 1 | KKENFRPISLMNIDAKILNKILA |
| 1 | | | | 1 | | NRIQQHIKKLIHNDQVGFIPGM |
| | | | | | | QGWFNIHKSINIIHHIKRTNDKN |
| | | | | | | HMIISIDAEKAFNKIQQPFMLKT |
| | } | | ĺ | | | LNKLGIDGTYLKIIRAIYDRPTA |
| | | | l | | | NVILNGQKLEAFPFKTGTRQGC |
| | | İ | | | | PLSPLLFNIVLKVLARAIRQETEI |
| | ļ | | | | | KGIQLAKEEVKLSLFADDMIVY |
| | | | | | | LENPIISAQNLLKLISNFSK/VSG |
| | | | | | | YKINVQKSQAFLYTINRQTESQI |
| 4330 | 34698 | A | 437 I | 3 | 1234 | 1 |
| 4331 | 34699 | Α | 4372 | 1 | 2850 | MGMGPAKPGMGGNLLVCWLQ |
| | | | | | | RPWEKRSIWAEVYRSSRYSHS |
| | | | | l | | WLPLSRKGCDFSGTCRQTLSIL |
| | | İ | ŀ | | | TQPLRQWGLEGIKKPNSWIISEE |
| | | | i | | | SVSNGGPPLLIPRQTASGVDLQ |
| | | | | | | QTPTDLQLRVLTVRRKTNKQK |
| | | | | ŀ | | GIASTSTKRTSTPKPHLYVTIIK |
| l | | | | | | DQSYIKPQRWGKNIAEKLKILKI |
| 1 | | | | | | RVALSLQRNAAPHQQWNKAG |
| | | | | | | RRMSLMSSQKKASEVIESQMN |
| | | 1 | | | | EIKGEEKFREKRVKRNEQSLQEI |
| | | | | | | WDYVKRPDLRLIGVPD |
| 4332 | 34700 | В | 4373 | 16 | 701 | |
| 4333 | 34701 | В | 4374 | I | 3743 | |
| 4334 | 34702 | Α | 4375 | 227 | 686 . | KVMLAEYPVFAQLTLTLPPSSA |
| | | 1 | | | | SWEPSRGPGPRGIRGSCPEWLA |
| | | | İ | | | SGPG\KAAPGAGVPPPAASFPDP |
| | | 1 | | | | PPRLRAPALAVSRGLRRELPSG |
| | | | | | | LDWTHCLRTLPSLIVQILQQAA |
| | | | | | | LLGLPPAYSDQLQRAGQLHFYS |
| | | | | | | GLIKISLVLTTRLSFWGTTE |
| 4335 | 34703 | Α | 4376 | 216 | 644 | VTYSKEKECGEVADSVAKTAL |
| | | | | | | EKDGAPRTGDPRPNLGADPPRS |
| 1 | | | | | | LVSSAGPQAVRPVKPARQFPPQ |
| | | | | l | | PPRYSQGPARAAGEEGRGMRPP |
| 1 | | | | l | | GAGRRLPGPPLPGPEASHSGQL |
| | | | | l | | PLM/PPGPGPRLGSQEPVSLSRY |
| | | | | | | LQTQARMPGPRP |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nuclcotide location of last | Amino acid sequence (X=Unknown, |
|--------|----------------|----------------|------------|-------------------|-----------------------------|---|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | ĺ | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| İ | | | | sequence | | |
| 4336 | 34704 | IA | 4377 | 18 | 1023 | OIOHSPLVSPLPSLPPOPLVAEE |
| 4336 | 34704 | l ^A | 4377 | 10 | 1023 | EPPVA/PWPRRLLPATSTSH/PSH |
| | | ĺ | | | | PLTEPVPPT\SGRGCCLWTKRO |
| | | | | | | |
| 1 | | | | İ | | QKMCRTTYTSVGRK/CTFPIDS |
| 1 | | 1 | | | | GALRLSDGEMRALQTPTGPQST |
| | | | | İ | | VEGHTHLQSL/PHHDRVTATPG TEPGLRAAGNRRIFYPGP/VTSO |
| | | 1 | | | | |
| 1 | | | | 1 | | VQPQLLCGYGNASRTPAALTPG PAPPTQASLPNCGICPHLQMGR |
| | | | | 1 | | PTSPC/PPEGGHPSSSLYISLSPPP |
| | | | | | | |
| | | | | İ | | PSAPALRLPPPLP\SAPTAPAL/P/ |
| | | | | | | PAAPSAPALRLLRPLPCCSFRPR |
| | | | 1 | | | PAAPSAPAPRLLPPLLVCSFRPC |
| | | | | | | PAAPSAPAGLLLPPLLCCSGLSP |
| 1227 | 24505 | - | 1070 | ļ | 984 | RLCCPHSSCSSDPPRLQRKADSS |
| 4337 | 34705 34706 | В | 4378 | 332 | 847 | WILL OF VEIGH CONTRIVENCE |
| 4338 | 34 / 00 | A | 43/9 | 332 | 1847 | VKLLLQDKEICILCQKTVYPME |
| | | ŀ | | | | CLVADKQNFHKSCF\RCHHCNS |
| | | 1 | | | | KLSLGNYASLHGQIYCKPHFKP |
| | | | | 1 | 1 | TFQNPKGNYDEGFGHKA\HKD |
| | | | | l | | RWNWQKPKADSVDFIPNEEPN |
| | ļ | | | l | | MCKNIAENTLVPGDRNEHLDA |
| | | l | | ł | ŀ | GNSEGQRNDLRKLGERGKLKV |
| 4339 | 34707 | L | 4380 | 305 | 505 | IWPPSKEIPKKTLPFEEELKMSK |
| 4339 | 34 /0 / | Α | 4380 | 303 | 303 | GNLERMLNLGMVKQQKLPAIM KTQVLML*AINVPAKPLFPQSG |
| 1 | | i | | ŀ | | GAVRTTHGGKSRLKETGATSD |
| | | 1 | | | | TE |
| 4340 | 34708 | A | 438I | 56 | 260 | IVKTOSIDG/MGNLRITEKGLKL |
| 4340 | 34700 | 1 | 4301 |]50 | 200 | EGDS/EFLQPLYAKEIQSRPGLG |
| | | l l | | | | TOEOSCOTLSSCSSRGOOOHAE |
| 4341 | 34709 | A | 4382 | 137 | 920 | TQLQ3CQTL33C33KGQQQHAL |
| 4342 | 34710 | A | 4383 | 532 | 1680 | LLTTRTSFRSENHRHVGLLLVM |
| 1342 | 34710 | ľ` | 4363 | 332 | 1000 | TDNTRDKEYFGDESKRENEEKT |
| j | | ŀ | | | _ | VEKSIGEKOATLTTHANIITIRH |
| | | ŀ | | | - | CVKPEPDFSDHLNLLLGRADIT |
| | | | | İ | | GEEMAAORSSVEKLANGNIAL |
| | | | | | | VDSLRSRSLEEGDSDPHKRLSG |
| | | | | 1 | | AQDIKTTVEEVIADVVEIARELE |
| | | | | | | LEVEPEDVTEFLOAHEKTLTDV |
| | | | | | | ELFLINEOIKWFLEMKSTPRED |
| | | | | | | AVIIAETITKVLEYDINLVTKOO |
| | l | | | l | | QGMRQLTPILKEVLLWVKCHQ |
| | | | | | | |
| | | | | l | | TALHATEKPFIKGRINPCGKIHT |
| | 1 | | | l | | CLNLRNCGQLLIREEEEEDKEE |
| | | | l | | | EEQYEEKEEEEEEEEEE |
| | l | | | l | | EEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEE |
| | l | | l | l | | DEEEDKEKEEEEDNKEEEEED |
| | | | L | L | | KEKEEEEDKE\EKEDKEEEEDK |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | | *=Stop codon, /=possible nucleotide |
| 1 | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | i | sequence | | |
| 4343 | 34711 | A | 4384 | 3 | 495 | EDTGTFRIY\ESAGAVKKARGF |
| | | | | | | LEFVEDFIQVSKNLIGKVIGKNO |
| | | | | ŀ | | KVIQEIVDKSDMVPVRIEGDSE |
| | i | | 1 | | | NKLPREDKDDRDSRHQRDSRR |
| | | | | · · | | CPGGRCRSVSGRRGRGGPRGG |
| | | 1 | | f | | KSSISSVPKDPDSNPYSVLDN/T |
| | | 1 | ł | 1 | | ESDOTADTDASKSHHSTNRHTE |
| 1 | | | ĺ | 1 | | SRRRTDEDAVL |
| 4344 | 34712 | A | 4385 | 1 | 550 | TESERKDELSDWSLAGEDDRDS |
| 1 | | | | Ì | | RHQRDSRRRPGGRGRSVSGGR |
| | | 1 | | 1 | | GRGGPRGGKSSISSVLKDPDSN |
| | 1 | | | | | PYSLLDNTESDQTADTDASESH |
| | | | 1 | | | HSTNRRRRSRRRRTDEDAVLM |
| | | | | | | DGMT\ESDTASVNENGL\AKDV |
| | | | | İ | | IEEHGPSEKAINGPT\SASG\DDIS |
| ļ | | | | ŀ | | KLQRTPGERKRLIP*KKENTQE |
| | | | | | | AAVLNGVS |
| 4345 | 34713 | Α | 4386 | 1 | 2063 | MAELTVEVRGSNGAFYKGFIK |
| l | | | | į . | \ | DVHEDSLTVVFENNWOPERQV |
| | | | | ł | | PFNEVRLPPPPDIKKEISEGDEV |
| | | 1 | | | | EVYSRANDQEPCGWWLAKVR |
| l | | 1 | | i | | MMKGEFYVIEYAACDATYNEI |
| | 1 | 1 | | 1 | | VTFERLRPVNQNKTVKKNTFFK |
| l . | | 1 | | | | CTVDVPEDLREACANENAHKD |
| | 1 | | | ł | | FKKAVGACRIFYHPETTQLMIL |
| | | | | | | SASEATVKRVNILSDMHLRSIR |
| | | | | | | TKLMLMSRNEEATKHLECTKQ |
| ļ | | | | l . | | LAAAFHEEFVVREDLMGLAIGT |
| | | | | 1 | | HGSNIQQARKVPGVTAIELDED |
| | 1 | | | | | TGTFRIYGESADAVKKARGFLE |
| | 1 | 1 | | ŀ | | FVEDFIQVPRNLVGKVIGKNGK |
| | 1 | | | 1 | | VIQEIVDKSGVVRVRIEGDNEN |
| | 1 | | | 1 | i | KLPREDGMVPFVFVGTKESIGN |
| | | | | | l | VQVLLEYHIAYLKEVEQLRME |
| | | | | 1 | | RLQIDEQLRQIGMGFRPSSTRGF |
| | | | | 1 | Į. | EKEKGYATDESTVSSVQGSRSY |
| | | | | 1 | | SGRGRGRRGPNYTSGYGTNSEL |
| | | | | | | SNPSETESERKDELSDWSLAGE |
| | 1 | | | | | DDRDSRHQRDSRRRPGGRGRS |
| | | | | | | VSGGRGRGGPRGGKSSISSVQY |
| l | 1 | | | 1 | | RSNIHNCSTLKRIFLASDMNIVL |
| 1 | 1 | | | 1 | | KDPDSNPYSLLDNTESDQTADT |
| 1 | | 1 | 1 | 1 | l | DASESHHSTNRRRRSRRRRTDE |
| 1 | İ | | | 1 | | DAVLMDGMTESDTASVNENGL |
| l | | | | 1 | | DDSEKKPQRRNRSRRRRFRGQ |
| | 1 | | | 1 | | AE\DRQPAIDFIYKEVEKVVSL |
| | | 1 | | 1 | | WQAKDVIEEHGPSEKAINGPTS |
| | | L | | L | | ASGDDISKLQRTPGEEKINTLKE |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon. /=possible nucleotide |
| 1 | sequence | | 09/540,217 | codnn for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 1 | | | | sequence | | |
| 4346 | 34714 | Α | 4387 | 1 | 1882 | CGSNMADVTVEVRGSNGAFYK |
| | | | | | | GFIKDVHEDSLTVVFENNWQPE |
| | | 1 | | | | RQVPFNEVRLPPPPDIKKEISEG |
| | 1 | 1 | | | | DEVEVYSRANDQEPCGWWLA |
| | | | 1 | | | KVRMMKGEFYVIEYAACDATY |
| | | 1 | | 1 | | NEIVTFERLRPVNQNKTVKKNT |
| | | i | | | | FFKCTVDVPEDLREACANENA |
| | | | | | | HKDFKKAVGACRIFYHPETTQL |
| | | l | | | | MILSASEATVKRVNILSDMHLR |
| | 1 | 1 | | | | SIRTKLMLMSRNEEATKHLECT |
| - | | | | | | KOLAAAFHEEFVVREDLMGLA |
| | | 1 | | | | IGTHGSNIQQARKVPGVTAIEL |
| | | 1 | | | | DEDTGTFRIYGESADAVKKAR |
| | | 1 | | | | GFLEFVEDFIQVPRNLVGKVIG |
| | | İ | | | | KNGKVIQEIVDKSGVVRVRIEG |
| | i | 1 | | | | DNENKLPREDGMVPFVFVGTK |
| | | | | | | ESIGNVOVLLEYHIAYLKEVEQ |
| l | | | | | | LRMERLQIDEQLRQIGSRSYSG |
| | | | | | | RGRGRRGPNYTSGYGTNSELSN |
| | | | | | | PSETESERKDELSDWSLAGEDN |
| | | 1 | İ | | | RDSRHORDSRRRPGGRGRSVSG |
| | | 1 | | | | GRGRGGPR\GGKSSISSVLKDPD |
| | | | | | | SNPYSLLDNT\ESDQTADTDASE |
| | 1 | | | | | SHHSTNRRRR/SIRRRRTD\EDA |
| | | 1 | | | | VLMNGMTESDTASVNENGLVT |
| l | 1 | | | | | VADYISRAESOSRORNLPRETL |
| | | | | | | AKNKKEMAKDVIEEHGPSEKAI |
| 1 | 1 | | | | | NGPTSASGDDISKLORTPGEEKI |
| | l | | | | | NTLKEENTQEAAVLNGVS |
| 4347 | 34715 | Α | 4388 | 2 | 421 | PRVRDSDTEDDSEAEHFESFIHP |
| | | | | | 1 | TAMMFTSTINLLOTLCLSAGVH |
| | | i | | | | AEIMOSEATKTLCGLL\KSSPNR |
| | 1 | | | | | LVYREOHRSWCTLGFVOSIALT |
| | ł | | | | 1 | LOVCGALSSLOWITLLMKVVE |
| 1 | ł | 1 | | | | GHAPFTATSLQRQILAVHLLQA |
| | | 1 | | | | VLPSWDK |
| 4348 | 34716 | A | 4389 | 269 | 417 | DLNCKVGSCFEVYSS*KQGIN*I |
| | 1 | 1 | " | 1 | | KLGDSKT*P*LSGPTSENLKNSS |
| | | 1 | | | | LAE |
| 4349 | 34717 | A | 4390 | I | 516 | |
| 4350 | 34718 | c | 4391 | ī | 1527 | |
| | 1= | | | <u> </u> | 1 | |

| NO: of peptide sequence of peptide sequence dodon for peptide sequence of peptide sequence of peptide sequence 4351 34719 A 4392 200 1267 TFSKASRGNPHSMTKAPSDFR KARQTGIPGCSQLGSRYSLEPE QSALRLVCIQKLQESSTICEDIFF CPL.CGRAWASTPL.TDSPSGH QPAVK-LGLVPSSTHTME.PFQ VLSTDDTSSSSSCSSSCSASSSSP VLLLLLFLLLLLLLLLLLLLLLLLLLLLLLLLLLLLLL | SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | | Amino acid sequence (X-Unknown, |
|---|--------|------------|-----|------------|------------|---------------------------|--|
| 4351 34719 A 4392 200 1267 TFSKASRGGNPHSMTKAPSDER KARQTGIFGCSQLGSRYSLEPE QSALRLVCIQKLQESSTTCEDFF CPL.CGRAWAVSTPL.TDSPSGH OPAVR-LGLVPSDTHPLFPC VLSTDDTSSSSCSSSCSASSSSS /SLLLLLFLLLLLLLLLLLLL LLK FLLLLFLLRPASPPLLPPALS PPL/HCSSSSAPPASPPAPPPPP APPPSPPSPPAPPPSSPSPALPPALS SSLSSSAQAEGSLRAPRESSPSL DPSAPQRVKVVPPQAGSGIRA GGALENRPRGKRPWLHFRGL RSRLPASLSRSPATTWERLRSS GRETGAATATATART MMGHSSAIPLTATGELKGQSP TKMPDPELGCQGAKSQGCSRN ARHQKARSMPLQDGHLALAIL LELAVQRGTLSQMISAILLLQ LWDSRAQETDNERSAQGTSTL LLSLQTFQGISCKOTPSEGN MHLLSGPLSPSESFLRESFFTVQ NCRNNEEVTLICKADLENHNK DGGFWIDEKVYDLISPGTQS LTGNSILAGPAGENPVALEAA FEFEVTRESMHAFCVGOYLEVR LYALSDAEDGGOTTL-WLQSSIF SGGLQTSQHYSYNEEKDEDH CS/SPVGTPASKSRCSIRWALG DHSQAFLQAIADNNIQDINVKT HQEGGRSYKEVTYVIERLRET, SNELRPAVQNDLSIISEFKLLSSL PRWRRIAQKIRERRKKRIPKKP ESTADEBKIONEESDLEEACILP HSPRNVDKRPAIKSRKKTIFKKP ESTADEBKIONEESDLEEACILP HSPRNVDKRPAIKSRKKTIFKKP ESTADEBKIONEESDLEEACILP HSPRNVDKRPAIKSRKKTIFKKP GPELAATMKIGTRVMRGVDW KWGDQGPPGGRVIGELGWLGGER GKYDLLALLELPSEDMASAQ GVSATVLEATRETAPVHLPVS GPELAATMKIGTRVMRGVDW KWGDQDGPPGGRVIGELGGENGGLGE GGKYDLLALELPAAAQPSAEDS DTEDDSASPNRLVYREQHRSW CMLGFYKSIALTFQVCGALSSP QWITLLMKWMRGAPFPAASL CMLGFYKSIALTFQVCGALSSP QWITLLMKWMRGAPFPAASL CMLGFYKSIALTFQVCGALSSP QWITLLMKWMRGHAPFPAASL | NO: | | hod | | | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| 4351 34719 A 4392 200 1267 TFSKASRGGNPHSMTKAPSDER KARQTGIPGCSQLGSRYSLEPE QSALRLVCIQKLQESSTTCEDFF CPLCGRAWAVSTPLTDSPSPGH CPLCGRAWAVSTPLTDSPSPGH OPAVK-LGLVPFSDTHHPLPFQ VLSTDDTSSSSCSSSSCSASSSSSSSSSSSSSSSSSSSSSSS | | sequence | | 09/540,217 | | of peptide sequence | deletion, \-possible nucleotide insertion) |
| KARQTGIPGCSQLGSRYSLEPE QSALRLVCIQKLQESSTTCEDFF CPLCGRAWAVSTPLIDSPSPGH OPAVK+LGLVPFSDTHHPLPFQ VLSTDOTSSSSSCSSSSSSSSSSSSSSSSSSSSSSSSSSSSS | | | | | sequence | | |
| QSALRILVCIQKI.QESSTTCEDFF CPLCGRAWAVSTPLTDSPSPGH QPAVK-LGLVPFSDTHHPLPFQ VLSTDDTSSSSCSSSSSSSSSSSSSSSSSSSSSSSSSSSSS | 4351 | 34719 | A | 4392 | 200 | 1267 | TESKASRGGNPHSMTKAPSDER |
| QSALRILVCIQKI.QESSTTCEDFF CPLCGRAWAVSTPLTDSPSPGH QPAVK-LGLVPFSDTHHPLPFQ VLSTDDTSSSSCSSSSSSSSSSSSSSSSSSSSSSSSSSSSS | 1557 | | | 1.07- | | | |
| CPLCGRAWAYSTPLTISSPSCH QPAVK+LGLVPFSDTHHPLPFQ VLSTDDTSSSSSCSSSCSASSSSSP //SLLLLLEFLLLRLLLLLLLLLLLLLLLLLLLLLLLLLLLL | | | ĺ | | ŀ | | |
| OPAVK*LGLVPFSDTHHPLPFQ VLSTDDTSSSSCSSSCSASSSSSSSSSSSSSSSSSSCSASSSSSSSS | | | | l | į. | | |
| VLSTDOTSSSSCSSSSSSSSSSSSSSSSSSSSSSSSSSSSSS | | | | | | | |
| SLLLLLEFLLLLLLLLLLLLLLLL FLLLLEFLLRPPASPPLPPALS PPL/HCSSSPSAPPASPPAPPPP APPPSPPPAPPSSSPSAPLPPA PPASPPSCSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSS | | | | | | | |
| FILLLLE, LIARPASPPLLPPALS PPL/HCSSSPSAPPASPPAPPPP PPPP APPSSAPPASPPSAPPSAPPPAPPPP APPSSAPSAPPASPPSAPSSAPLPA - PASPPFSCSSSCSSSSSSSSSSSSSSSSSSSSSSSSSSSS | | | | | | | |
| APPPSPPAPSASSSSPALPA PASPPFSCSSSSCSSSSSSSSSSSSSSSSSSSSSSSSSSS | | | | | | | |
| PASPPSCSSSSCSSSSSSSSSSSSSSSSSSSSSSSSSSS | | | | l | | | |
| SSLSSSAQAEGSLRAPRESSPSL DPSAPQNKVVPPQAGSGIRA GGALENRPGKKPWLHERPGL RSRLPARSLRSRPAPTRWRLRSS GRETGAATATATART 4352 34720 A 4393 I 2607 MMGHSSAIPLTATPGELKGQSP TKMPDPELGCGGAKSQGCSRN ARHQKARSMPLOPOHLALALI LELAVORGTLSQMLSAILLLLQ LWDSRAQETDNERSAQGTSTL LLSLLQTFQSICSKDTPPSEGN MHLLSGPLSPESFLRESFTVQ NCRNNEEVTLICKADLENHNK DGGFWIVIDEKVYDIKDFOTOS LTGNSIL AQPAGENPVALEAA FEFEVTRESMHAFCVGQYLEVR LYALSDAEDGRGTL*WLQSSIF SGGLQTSQHRSVYNEEKDEH CSSPVGTPASKSRCSIRWALG DHSQAFLQAIADNNIQDHNVETT HQEGGRSYKEVTPVIERLRFL SNELRPAVGNDLSIISEFKLLSSL PRWRRIAQKIRERKKRIPKKP ESTADEEKIGNEESDLEEACILP HSPINVDKRPAIKSPKTITSENP LGPSLGSIPQARFLLMMLSMLT LQHSANNLDLLNSGTLALTOT ALRLIGPSCONVEEDMASAQ GVSATVLEATEKETAPVHLPVS GPELAATMKIGTRVMRGVDW KWGDDQDPPPGLGRVIGELGE DGWIRVQWGTGSTINSYRMGK EGKYDLLALELPAAAQPSAEDS DTEDDSASPNRLVYREQHRSW CMLGFYRSMLTPQVCGALSSP QWITLLMKWMKGHAPFPAASL | l | | | | | | APPPSPPPAPPPSAPSSPAPLPPA |
| DPSAPORVEVYPPOAGSGIRA GGALENRPRGKKPWLHFRPGL RSRLPARSLRSRPAFTEWRLRSS GRFTGAATATATART 4352 34720 A 4393 I 2607 MMGHSSAIPLTATPGELKGOSP TKMPDPELGCGOAKSOGGSRN ARHOKARSMPLQDQHLALAIL LELAVORGTLSQMLSAILLLLQ LWDSRAQETDNERSAQCTSTL LLSLLQTFQSIGCKDTPSEGN MHILLSQPLSPESFLRESFTVQ NCRNNEEVTLICKADLENHNK DGGFWIVIDEKVYDIKDPÖTOS LTGNSILAGPAGENPVVALEAA FEFEVTRESMHAFCVQOYLEWR LYALSDAEDGROTTL*WLQSSIF SGGLOTSQHNYVJEEKDEDH CSSPVGTPASKSRCSIRWALG DHSQAFLQAIADNNIQDINVKT HQEGGRSYKEVCTYVIEEKEPL SNELRPAVGNDLSIISEFKLLSSL PRWRRIAGKIRERRKRIPKKP ESTADEEKIGNEESDLEEACILP HSPINVDKRPAIKSPKTITISENP LGPSLOSIPQARELMMLSMLT LQHSANNLDLLINSGTLALTOT ALRLIGPSCDNVEEDMASAQ GVSATVLEATRKETAPVHLPVS GPELAATMKIGTEVMROVDW KWGDQDGPPGLGRVIGELGE DGWIRVQWGTGSTINSYRMGK EGKYDLLALELPAAAQPSAEDS DTEDDSASPNRLVYREQHRSW CMLGFYRSIALTPQVCGALSSP QWITLLMKMSMLTYPQCGALSSP QWITLLMKMSMLTYPQCGALSSP QWITLLMKMSMLTYPQCGALSSP | | | | | | | PASPPFSCSSSSCSSSCSSSFSSC |
| DPSAPORVEVYPPOAGSGIRA GGALENRPRGKKPWLHFRPGL RSRLPARSLRSRPAFTEWRLRSS GRFTGAATATATART 4352 34720 A 4393 I 2607 MMGHSSAIPLTATPGELKGOSP TKMPDPELGCGOAKSOGGSRN ARHOKARSMPLQDQHLALAIL LELAVORGTLSQMLSAILLLLQ LWDSRAQETDNERSAQCTSTL LLSLLQTFQSIGCKDTPSEGN MHILLSQPLSPESFLRESFTVQ NCRNNEEVTLICKADLENHNK DGGFWIVIDEKVYDIKDPÖTOS LTGNSILAGPAGENPVVALEAA FEFEVTRESMHAFCVQOYLEWR LYALSDAEDGROTTL*WLQSSIF SGGLOTSQHNYVJEEKDEDH CSSPVGTPASKSRCSIRWALG DHSQAFLQAIADNNIQDINVKT HQEGGRSYKEVCTYVIEEKEPL SNELRPAVGNDLSIISEFKLLSSL PRWRRIAGKIRERRKRIPKKP ESTADEEKIGNEESDLEEACILP HSPINVDKRPAIKSPKTITISENP LGPSLOSIPQARELMMLSMLT LQHSANNLDLLINSGTLALTOT ALRLIGPSCDNVEEDMASAQ GVSATVLEATRKETAPVHLPVS GPELAATMKIGTEVMROVDW KWGDQDGPPGLGRVIGELGE DGWIRVQWGTGSTINSYRMGK EGKYDLLALELPAAAQPSAEDS DTEDDSASPNRLVYREQHRSW CMLGFYRSIALTPQVCGALSSP QWITLLMKMSMLTYPQCGALSSP QWITLLMKMSMLTYPQCGALSSP QWITLLMKMSMLTYPQCGALSSP | | | | | | | SSLSSSAOAEGSLRAPRESSPSL |
| GGALENRPRGKEPWLHERPGL RSRLPARSIRSRPAPTRWRLRSS GRFTGAATATATAET MMGHSSAIPLTATTGELEGOSP TKMPDPELGCGOARSQGCSN ARHQKARSMPLQDQHLALAIL LELAVORGTLSQMLSAILLLLQ LWDSRAQETDNERSAQGTSTL LLSLLQTFQSIICSKOTPPSEGN MHLLSQPLSRSESFLRESFTTVQ NCRNNEEVTLICKADLENHNK DGGFWIVIDEKVYDIKDPÖTQS LTGNSILAQPAGENPVVALEAA FEFEVTRESMHAFCVGQYLEVR LYALSDAEDGRGTL*WLQSSIF SGGLQTSQHTVSYNEEKDEDH CSSPVGTFASKSRCSIIRWALG DHSQAFLQAIADNIODINVSTT HQEGGRSYKEVCTPVIERLRFL SNELRPAVGNDLSIISEFKLLSSL PRWRRIAQKIIRERRKKRIPKKP ESTADEEKIGNEESDLEEACILP HSPHNVDKRPALKSPKTTISENP LGPSLGSIPQARFLLMMLSMLT LQHSANNLDLLLNSGTLALTQT ALRLIGPSCONVEEDMASAQ GVSATVLEATRKETAPVHLPVS GPELAATMKIGTRVMRGVDW KWGDQDGPPPGLGR VIGELGE DGWIRVQWGTGSTINSYRMGK EGKYDLLALERPAAQPSAEDS DTEDDSASSPRLVYREQHRSW CMLGFYRSALTPQVCGALSSP QWITLLMKVMKGHAPFPAASL QUITLLMKVMKGHAPFPAASL | | | | | | | |
| RSRLPARSLRSRPAPTRWRLRSS GRFTGAATATATATT 4352 34720 A 4393 1 2607 MMGHSSAIRLTATPGELKGQSP TKMPDPELGCQGAKSQGCSRN ARHQKARSMPLQDHILALALL LELAVORGTLSQMLSAILLLQ LWDSRAQETDNERSAQGTSTL LLSLLQTTQSIIGSKDTPPSEGN MHLLSQPLSPSESFLRESFTVQ NCRNNEEVTLICKADLENNIK DGGFWIVIDEKVYDIKDFOTOS LTGNSILAQFAGENPVVALEAA FEFEVTRESMHAFCVQVLEVW LYALSDAEDGRGTL*WLQSSIF SGGLOTSQHRYNSEKDEDH CSSPVGTPASKSRCSIRWALG DHSQAFLQAIADNNIQDHNVKT HQEGGRSYKEVTFVIEBLERL SNELRPAVGNDLSIISEFKLLSSL PRWRRIAQKIRERKKRIPKKP ESTADEEKIGNEESDLEEACILP HSPINVDKRPIAKSFKTITSENP LGPSLGSIPQARFLLMMLSMLT LQHSANNLDLLLNSGTLALTOT ALRLIGPSCONVEEDMASAQ GVSATVLEATRKETPVHLPVS GPELATMKIGTRVMRGVDW KWGDDQDPPGLGRVIGELGE DGWIRVQWGTGSTNSYRMGK EGKYDLLALELPAAAQPSAEDS DTEDDSASPNRLVYREQHRSW CMLGFYRSALTFQVCGALSSP QWITLLMKWNKGHAPFPAASL | | | | | l | | |
| 4352 34720 A 4393 I 2607 MMGHSSAIPLTATFOELEGOSP TKMPDPELGCGAKSQGCSRN ARHOKARSMPLODOHLALAIL LELAVORGTLSQMLSAILLLQ LWDSRAQETONERSAQCISTL LLSLLQTFOSIICSKOTPPSEGN MHILLSGPLSPRESFIRESFFTVQ NCRNNEEVTLICKADLENHNK DGGFWIVIDEKVYDIKDFOTOS LTGNSILAQPAGENPVVALEAA FEFEVTRESMHAFCVGQYLEVR LYALSDAEDGROTL*WLQSSIF SGGLQTSQHHSYNEKDEDH CSSPVGTFASKSRCSIIRWALG DHSQAFLQAIADNIODINIVETH HQEQGRSYKEVCTPVIERLRFL SNELRPAVGNDLSIISEFKLLSSL PRWRRIAQKIIRERFKKRIPKKP ESTADEEKIGNEESDLEEACILP HSPINVDKRPAIKSPKTITSENP LGPSLGSIPQARFLLMMLSMLT LQHSANNLDLLLNSGTLALTOT ALRLIGPSCONVEEDMASAQ GVSATVLEATEKETAPVHLPVS GPELAATMKIGTRVMRGVDW KWGDDQDPPPGLGRVIGELGE DGWIRVQWGTGSTINSYRMGK EGKYDLLALELPAAAQPSAEDS DTEDDSASPNRLVYREQHRSW CMLGFYRSALTPQVCGALSSP QWITLLMKVMKGHAPFPAASL | 1 | | | | | | |
| 4352 34720 A 4393 I 2607 MMGHSSAIPLTATFOELEGOSP TKMPDPELGCGAKSQGCSRN ARHOKARSMPLODOHLALAIL LELAVORGTLSQMLSAILLLQ LWDSRAQETONERSAQCISTL LLSLLQTFOSIICSKOTPPSEGN MHILLSGPLSPRESFIRESFFTVQ NCRNNEEVTLICKADLENHNK DGGFWIVIDEKVYDIKDFOTOS LTGNSILAQPAGENPVVALEAA FEFEVTRESMHAFCVGQYLEVR LYALSDAEDGROTL*WLQSSIF SGGLQTSQHHSYNEKDEDH CSSPVGTFASKSRCSIIRWALG DHSQAFLQAIADNIODINIVETH HQEQGRSYKEVCTPVIERLRFL SNELRPAVGNDLSIISEFKLLSSL PRWRRIAQKIIRERFKKRIPKKP ESTADEEKIGNEESDLEEACILP HSPINVDKRPAIKSPKTITSENP LGPSLGSIPQARFLLMMLSMLT LQHSANNLDLLLNSGTLALTOT ALRLIGPSCONVEEDMASAQ GVSATVLEATEKETAPVHLPVS GPELAATMKIGTRVMRGVDW KWGDDQDPPPGLGRVIGELGE DGWIRVQWGTGSTINSYRMGK EGKYDLLALELPAAAQPSAEDS DTEDDSASPNRLVYREQHRSW CMLGFYRSALTPQVCGALSSP QWITLLMKVMKGHAPFPAASL | | | | | ĺ | | |
| ARHOKARSMPLODOHLALAIL LELAVORGTLSQMLSAILLILQ LWDSRAQETDNERSAQCTSTL LLSLLQTFQSIICSKDTPPSEGN MHILISQPLSMESSFLRESFTFVQ NCRNNEEVTLICKADLENHNK DGGFWIVIDEKVYDIKDFQTQS LTGNSILAQFAGENPVALEAA FEFEVTRESMHAFCVGQYLEVR LYALSDAEDGRGYTL*WLQSSIF SGGLQTSQHRYSYNEEKDEDH CSSPYGTFASKSRCSIIRWALG DHSQAFLQAIADNIODINVSTT HQEGGRSYKEVCTFVIERLRFL SNELRPAVGNDLSIISEFKLLSSL PRWRRIAQKIIRERRKKRIPKKP ESTADEEKIGNEESDLEEACILP HSPINVDKRPALKSPKTTISCHP LGPSLGSIPQARFLLMMLSMLT LQHSANNLDLLLNSGTLALTQT ALRLIGPSCONVEEDMASAQ GVSATVLEATRKETAPVH.PVS GPELAATMKIGTRVMRGVDW KWGDQDGPPFGLGR VIGELGE DGWIRVQWGTGSTINSYRMGK EGKYDLLKALERPAAQPSAEDS DTEDDSASSPRLVYREQHSW CMLGFYESSLEPSDLEFSSLESS DTEDDSASSPRLVYREQHSW CMLGFYESSLEPSSLESS QWITLLMKVMKGHAFFFAASL | 4352 | 34720 | A | 4393 | 1 | 2607 | |
| LELAVORGTLSOMICSAILLLLQ LWDSRAQETDNERSAQGTSTL LLSLLQTTQSIICSKDTPPSEGN MHLLSGPLSPSESFLRESFTVQ NCRNNEEVTLICKADLENNIK DGGFWIVIDEKVYDIKDFOTOS LTGNSILAQFAGENPVVALEAA FEFEVTRESMHAFCVQVLEVW LYALSDAEDGROTL*WLQSSIF SGGLOTSOHNYNEKDEDH CSSPVGTPASKSRCSIRWALG DHSQAFLQAIADNNIQDHNVKT HQEGGRSYKEVTFVIERLERL SNELRPAVGNDLSIISEFKLLSSL PRWRRIAQKIIRERKKRIPKKF ESTADEEKIGNEESDLEEACILP HSPINVDKRPAIKSFKITISENP LGPSLGSIPQARFLLMMLSMLT LQHSANNLDLLLNSGTLALTOT ALRLIGPSCONVEEDMASAQ GVSATVLEATEKETAPVHLPVS GPELATMKIGTRVMRGVDW KWGDDQDPPGLGRVIGELGE DGWIRVQWGTGSTNSYRMGK EGKYDLLALERPAAQPSAEDS DTEDDSASPNRLVYREQHRSW CMLGFYRSALTPQVCGALSSP QWITLLMKWNKGALSPPASASL | | | | | | | TKMPDPELGCOGAKSOGCSRN |
| LWDSRÄOGTINIERSAGGISTIL LLSLQTFQSICSKD TPPSEGN MHLLSGPLSPESFLRESFITUQ NCRNNEEVTLICKADLENHNK DGGEWIJDEKYVDIKDFQTOS LTGNSILAGPAGENPVVALEAA FEFEVTRESMHAFCVGQYLEWR LYALSDAEDGRGYIL*WLQSSIF SGGLQTSQHHYSYNEEKDEDH CSSPSYGTPASKSRCSIRWALG DHSQAFLQAIADINNIQDHINVKT HQEGGRSYKEVTFVIERLERL SNELRPAVQNDLSIISEFKLLSSL PRWRRIAGKIIRERRKKRIPKKP ESTADEEKIGNEESDLEACILP HSPINVDKRPAIKSPKTITSENP LGPSLGSIPQARFLIMMLSMLT LQHSANNLDLLLNSGTLALTOT ALRLIGPSCDNYEEDMNASAQ GVSATVLEATRKETAFVHLPVS GPELAATMKIGTERVMRGVDW KWGDQDGPPGGERVIGELGE DGWIRVQWGTGSTNSYRMGK EGKYDLKLAELPAAQPSAEDS DTEDDSASPNRLYYREQHRSW CMLGFYKSIALTFQVCGALSSP QWITLLMKMSMCTPAPPASASL | İ | | 1 | | İ | | ARHOKARSMPLODOHLALAIL |
| LLSLLOTFOSIICSKDTPPSEGN MHLLSGPLSPSESFLRESFTVQ NCRNNEEVTLICKADLENHINK DGGFWIVIDEKVYDIKDFOTOS LTGNSILAQPAGENPVVALEAA FEFEVTRESMHAFCVGQYLEVR LYALSDAEDGROTIL*WLQSSIF SGGLQTSQHHYSYNEEKDEDH CSSPVGTPASKSRCSIIRWALG DHSQAFLQAIADNIQDHINVET HQEQGRSYKEVCTPVIERLRFL SNELRPA VGNDLSIISEFKLLSSL PRWRRIAQKIIRERRKRIPKKP ESTADEEKIGNEESDLEEAGLLP HSPINVDKRPAIKSPKTTISEPH LGPSLGSIPQARFLLMMLSMLT LQHSANNLDLLLNSGTLALTOT ALRLIGPSCONVEEDMASAQ GVSATVLEATEKETAPVHLPVS GPELAATMKIGTRVMRGVDW KWGDQDGPPGLGRVIGELGE DGWIRVQWGTGSTINSYRMGK EGKYDLKLAELPAAAQPSAEDS DTEDDSASPNRLVYREQHRSW CMLGFYRSWLTYPEQHRSW CMLGFYGRAATPFAASL QWITLLMKWNKGHAPFPSASL | | | | | | | LELAVORGTLSOMLSAILLLLO |
| MHLLSQPLSPESFLRESFTVQ NCRNNEEVTLICKADLENHNK DGGFWIVIDEKVYDIKDPQTQS LTGNSILAQPAGENPVVALEAA FEFEVTRESMHAFCVQQYLEYW LYALSDAEDGROTTL-WLQSSIF SGGLQTSQHYSYNEEKDEDH CSSPYGTPASKSRCSIRWALG DHSQAFLQAIADNNIQDINVKT HQEGGRSYKEVCTYVERLER; SNELRPAVGNDLSIISEFKLLSSL PRWRRIAQKIRERRKKRIPKKP ESTADEEKIGNEESDLEEACILP HSPINVDKRPIAIKSPKTTISENP LGPSLQSIPQARFLMMESMLT LQHSANNLDLLLNSGTLALTOT ALRLIGPSCDNVEEDMASAQ GVSATVLEATRKETAPVHLPVS GPELAATMKIGTKVMRGVDW KWGDQDGPPGLGRVIGELGE DGWIRVQWGTGSTNSYKMGK EGKYDLLKALERPAAQPSAEDS DTEDDSASPNRLVYREQHRSW CMLGFYRSALTPQVCGALSSP QWITLLMKWSMCHAPFPAASL | | | l | | | | LWDSRAGETDNERSAGGTSTL |
| NCRNNEEVTLICKADLENHINK DGGWIUDEKVYDIKDFOTOS LTGNSILAQFAGENPVALEAA FEFEVTRESMHAFCVGOYLEVR LYALSDAEDGGOTT-WLOSSIF SG/GLQTSQIHYSYNEEKDEDH CS/SPVGITPASKSRCSIIRWALG DHSQAFLQAIADNIQDHINVETH HQEQGRSYKEVCTPVIERLRFL SNELRPAVGNDLSIISEFKLLSSL PRWBRIAQKIIRBRRKKRIPKKFP ESTADEBKIGNEESDLEEACILP HSPINVDKRPALKSPKTITSENP LGPSLGSIPQARFLLMMLSMLT LQHSANNLDLLLNSGTLALTOT ALRLIGPSCONVEEDMASAQ GVSATVLEATRKETAPVHLPVS GPELAATMKIGTRVMGVOW KWGDQDGPPPGLGR VIGELGE DGWIRVQWGTGSTINSYRMGK EGKYDLKLAELPAAAQPSAEDS DTEDDSASPNRLVYREQHRSW CMLGFVERSHETS DTEDDSASPNRLVYREQHRSW CMLGFVERSHLTYPKGALSSP QWITLLMKVMKGHAFPFAASL | ì | | | i | | | LLSLLOTFOSIICSKDTPPSEGN |
| DGGFWINDEKVYDIKDFOTOS LTGNSILAQFAGENPVVALEAA FEFEVTRESMHAFCVQVYLEVW LYALSDAEDGRGTL*WLQSSIF SGGLOTSQHNYNEKDEDH CSSPVGTPASKSRCSIRWALG DHSQAFLQAIADNNIQDHNVKT HQEQGRSYKEVCTFVIERLERL SNELRPAVGNDLSIISEFKLLSSL PRWRRIAQKIIRERKKRIPKKF ESTADEEKIGNEESDLEEACILP HSPINVDKRPIAKSPKITISENP LGPSLGSIPQARFLLMMLSMLT LQHSANNLDLLLNSGTLALTOT ALRLIGPSCDNVEDEMMASAQ GVSATVLEATEKETAPVHLPVS GPELATMKIGTRVMRGVDW KWGDDQDPPGLGRVIGELGE DGWIRVQWGTGSTNSYRMGK EGKYDLKLAELPAAAQPSAEDS DTEDDSASPNRLVYREQHRSW CMLGFYRSALTFPVCGALSSP QWITLLMKWNKGHAFPFAASL | | | | | İ | | MHLLSGPLSPSESFLRESFFTVQ |
| LTGNSILAQFAGENPVALEAA FEFEVTRESMHAFCVGQYLEVR LYALSDAEDGRGNTL*WLQSSIF SGGLOTSQIHYSYNEEKDEDH CS/SPVGTPASKSRICSIIRWALG DHSQAFLQAIADNNIQDHNYKT HQEGGRSYKEVCTPVIERLRFL SNELRPAVGNDLSIISFKLLSSI. PRWRAIAQKIIRERRKKRIPKKP ESTADEERIGNEESDLEEACILP HSPINVDKRPAIKSPKTTISENP LGPSLGSIEPQARFLLMMLSMLT LQHSANNLDLLINSGTLALTQT ALRLIGPSCDNVEEDMASAQ GVSATVLEATRKETAPVHLPVS GPELAATMKIGTRVMRGVDW KWGDQDGPPPGLGR VIGELGE DGWIRVQWGTGSTINSYRMGK EGKYDLKLAELPAAAQPSAEDS DTEDDSASPNELVYREQHISW CMLGFVERSHVYREQHISW | 1 | | | | | | NCRNNEEVTLICKADLENHNK |
| FEFEVTRESMHAFCVGOYLEVR LYALSDAEDGRGTL*WLQSSIF SGGLQTSQHRYSYNEEKDEDH CSSPVGTFASKSRCSIRWALG DHSQAFLQAIADNIQDHINVET HQEQGRSYKEVCTPVIERLRFL SNELRPA VGNDLSIISEFKLLSSL PRWRRIAQKIIRERRKKRIPKKP ESTADEEKIGNEESDLEEACILP HSPHNOKRPAIKSPKTTISENP LGPSLGSIPQARFLLMMLSMLT LQHSANNLDLLLNSGTLALTQT ALRLIGPSCONVEEDMASAQ GVSATVLEATEKETAPVHLPVS GPELAATMKIGTRVMRGVDW KWGDQDGPPGLGR VIGELGE DGWIRVQWGTGSTINSYRMGK EGKYDLKLAELPAAQPSAEDS DTEDDSASPNRLVYREQHRSW CMLGFYRSSLTPGVCGALSSP QWITLLMKWNKGHAPFPAASL | | | | | i | | DGGFWIVIDEKVYDIKDFQTQS |
| LYALSDAEDGROTT-WLOSSIF SG/GLQTSQHYSYNEKDEDH CS/SPYCTPASKSRCSIRWALG DHSQAFLQAIADNNIQDHNVKT HQEGGRSYKEVTYVIERLER; SNELRPAVQNDLSIISEKLLSSL PRWRIAQKIIRERRKKRIPKKP ESTADEBKIONEESDLEBACILP HSPINVDKRPIAIKSPKTTISENP LGPSLGSIPQARFLIMMESMLT LQHSANNLDLLLNSGTLALTOT ALRLIGPSCONVEEDMASAQ GVSATVLEATRKETAPVHLPVS GPELAATMKIGTKVMRGVDW KWGDDQFPPGERVIGELGE DGWIRVQWGTGSTNSYRMGK EGKYDLKLAELPAAQPSAEDS DTEDDSASPNRLVYREQHRSW CMLGFYRSALTFQVCGALSSP QWITLLMKWRACHAPFPAASL QUITLLMKWRACHAPFPAASL | | | | | 1 | | LTGNSILAQFAGENPVVALEAA |
| SGGLOTSQIHYSYNEEKDEDH CSSPYGTPASKSRICSIIRWALG DHSQAFLQAIADNNIQDINVKT HQEGGRSYKEVCTPVIERLRFL SNELRPAVONDLSIISERKLLSSL PRWRRIAQKIIRERRKKRIPKKP ESTADEEKIGNEESDLEEACILP HSPINYDKRPAIKSPKTTISENP LGPSLGSIPQAFFLLMMLSMLT LQHSANNLDLLINSGTLALTQT ALRLIGPSCDNVEEDMASAQ GVSATVLEATRKETAPVHLPVS GPELAATMKIGTRVMGVDW KWGDQDGPPPGLGR VIGELGE DGWIRVQWGTGSTNSYRMGK EGKYDLKLAELPAAQPSAEDS DTEDDSASPNELVYREQHISW CMLGFVRSIALTPQVCGALSSP QWITLLMKVMKGHAPFPAASL | | | ĺ | | | | FEFEVTRESMHAFCVGQYLEVR |
| CSSPYGTPASKSRCSIRWALG DHSQAFLQAIADNNIQDHNVKT HQEQGRSYKEVCTPVIERLERL SNELRPA VGNDLSIISEFKLLSSL PRWRRIAQKIIRERKKRIPKKP ESTADEEKIGNEESDLEEACILP HSPINVDKRPIAIKSPKITISENP LGPSLGSIPQARFLLMMLSMLT LQHSANNLDLLLNSGTLALTOT ALRLIGPSCDNVEDEMNASAQ GVSATVLEATEKETAPVHLPVS GPELAATMKIGTRVMRGVDW KWGDDQDPPGLGRVIGELGE DGWIRVQWGTGSTINSYRMGK EGKYDLKLAELPAAAQPSAEDS DTEDDSASPNRLVYREQHRSW CMLGFYGRSALTPGVCGALSSP QWITLLMKWNKGHAPFPAASL | | | | | i | | LYALSDAEDGRG\TL*WLQSSIF |
| DHSQAELQAIADNNIQDINVKT HQEQGRSYKEVCTPVIERLRFL SNELERA VGNDLSIISEFKLLSSL PRWRIAQKIIERRKKRIPKEP ESTADEEKIGNEESDLEEACILP HSPINVDKRPIAKSPKTITSENP LGPSLGSIPQAEFLLMMLSMLT LQHSANNLDLLLNSGTLALTOT ALRLIGPSCDNVEEDMNASAQ GVSATVLEATRKETAPVHLPVS GPELAATMKIGTRVMRGVDW K WGDQDGPPPGLGR VIGELGE DGWIRVQWGTGSTNSYRMGK EGKYDLKLAELPAAAQPSAEDS DTEDDSASPNELVYREQHISW CMLGFVRSIALTPQVCGALSSP QWITLLMKVMKGHAPFPAASL | | | İ | | | | SG/GLQTSQIHYSYNEEKDEDH |
| HQEQGRSYKEVCTPVIBELRFL SNELRPA VGNDLSIISEFKLLSSL PRWRRIAQKIIKERRKKRIPKKP ESTADEEKIGNEESDLEFACILP HSPINVDKRPALKSPKTITSENP LGPSLGSIPQARFILLMMLSMLT LQHSANNLDLLLNSGTLALTQT ALRLIGPSCONVEEDMASAQ GVSATVLEATEKETAPVHLPVS GPELAATMKIGTRVMRGVDW KWGDQDCPPPGLGR VIGELGE DGWIRVQWGTGSTINSYRMGK EGKYDLKLAELPAAQPSAEDS DTEDDSASSPRLVYREQHRSW CMLGFVRSIALTPQVCGALSSP QWITLLMKVMKGHAPFPAASL | | | l | | İ | | CS/SPVGTPASKSR\CSHRWALG |
| SNELRPAVGNDLSIISEKLLSSL PRWRIAQKIIRERKKRIPKK ESTADEBKIGNEESDLEEACILP HSPINVDKRPIAIKSPKTTISENP LGPSLGSIPQARFLIAMLSMLT LQHSANNLDLLLNSGTLALTOT ALRLIGPSCONVEEDMASAQ GVSATVLEATRKETAPVHLPVS GPELAATMKIGTKVMRGVDW KWGDQDGPPGLGRVIGELGE DGWIRVQWGTGSTNSYRMGK EGKYDLKLAELPAAQPSAEDS DTEDDSASPNRLVYREQHRSW CMLGFVRSIALTPQVCGALSSP QWITTLMKWMRGHAPFPAASL | | } | i | | l | | DHSQAFLQAIADNNIQDHNVKT |
| PRWRIJAQKIIRERRIKKIPIKKP ESTADEEKIONEESDLEEACILP HSPINVDKRPIJAIKSPKTITSENP LGPSLGSIPQARFLLMMLSMLT LQHSANNLDLLINSGTLALTQT ALRLIGPSCDNVEEDMASAQ GVSATVLEATRKETAPVHLPVS GPELAATMKIGTRVMRGVDW KWGDQDGPPPGLGRVIGELGE DGWIRVQWGTGSTINSYRMGK EGKYDLKLAELPAAAQPSAEDS DTEDDSASPNRLVYREQHISW CMLGFVRSIALTPQVCGALSSP QWITLLMKVMKGHAPFPAASL | | | | | | ŀ | HQEQGRSYKEVCTPVIERLRFL |
| ESTADERKIGNERSDLERACILP HSPINVDKRPIAIKSPKTITSENP LGPSLGSIPQARFLLMMLSMLT LQHSANNLDLLLNSGTLALTOT ALRLIGPSCDNYEDEMNASAQ GVSATVLEATRKETAPVHLPVS GPELAATMKIGTRVMRGVDW KWGDDQPPPGLGRVIGELGE DGWIRVQWGTGSTNSYRMGK EGKYDLKLAELPAAQPSAEDS DTEDDSASPNRLVYREQHRSW CMLGFVRSALTPGVCGALSSP QWITLLMKVMKGHAPFPAASL | | | | | | | SNELRPA VGNDLSIISEFKLLSSL |
| HSPINVDKRPIAIKSPKTITSENP LGPSLGSIPQARFLLMMLISMLT LQHSANNLDLLLINSGITALTOTI ALRIJGPSCDNVEEDMNASAQ GVSATVLEATRKETAPVHLPVS GPELAATMKIGTRVMRGVDW KWGDQDGPPGLGRVIGELGE DGWIRVQWGTGSTNSYRMGK EGKYDLKLAELPAAQPSAEDS DTEDDSASPNELYYREQHISW CMLGFVRSIALTPQVCGALSSP QWITLLMKVMKGHAPFPAASL | | | | | | | PRWRRIAQKIIRERRKKRIPKKP |
| LGPSLGSIPQARFLLMMLSMLT LQHSANNLDLLNSGTLALTOT ALRLIGPSCDNYEEDMASAQ GVSATVLEATRKETAPVHLPVS GPELAATMKIGTRYMRGVDW KWGDQDGPPPGLGRVIGELGE DGWIRVQWGTGSTINSYRMGK EGKYDLKLAELPAAQPSAEDS DTEDDSASPNRLVYREQHRSW CMLGFVRSIALTPQVCGALSSP QWITLLMKVMKGHAPFPAASL | | | | | | | ESTADEEKIGNEESDLEEACILP |
| LQHSANNLDLLINGTLALTOT ALRLIGPSCDNYEEDMNASAQ GVSATVLEATRKETAFVHLPVS GPELAATMKIGTKVMRGVDW KWGDQDPPGLGRVIGELGE DGWIRVQWGTGSTNSYRMGK EGKYDLKLAELPAAQPSAEDS DTEDDSASPNRLVYREQHRSW CMLGFVRSIALTFQVCGALSSP QWITLLMKWMKGHAFPFAASL | | | | | | | HSPINVDKRPIAIKSPKTITSENP |
| ALR.I.GPSCDNYEEDMNASAQ GVSATVLEATRKETAPVHLPVS GPELAATMKIGTRVMRGVDW KWGDQDGPPGLGRVIGGLGE DGWIRVQWGTGSTNSYRMGK EGKYDL.KLAELPAAAQPSAEDS DTEDDSASPNELYYREQHISW CMLGFVRSIALTPQVCGALSSP QWITLLMKVMKGHAPFPAASL | | | | | | | LGPSLGSIPQARFLLMMLSMLT |
| GVSATVLEATEKETAPVHLPVS GPELAATMKIGTRVMRGVDW KWGDQDGPPGLGRVIJGELGE DGWIRVQWGTGSTNSYRMGK EGKYDLKLAELPAAAQPSAEDS DTEDDSASPNRLVYREQHRSW CMLGFVRSIALTFQVCGALSSP QWITLLMKVMRGHAFPFAASL | | | | | | | LQHSANNLDLLLNSGTLALTQT |
| GPELAATMKIGTRVMRGVDW KWGDQDGPPGLGEVIGELGE GGWRVQWGTGSTNSYRMGK EGKYDLKLAELPAAAQPSAEDS DTEDDSASPNELYYREQHIRSW CMLGFVRSIALTPQVCGALSSP QWITLLMKVMKGHAFFPAASL | | | 1 | | 1 | | ALRLIGPSCDNVEEDMNASAQ |
| KWGDQDGPPPGLGR VIGELGE DGWIRVQWGTGSTINSYRMGK EGKYDLKLAELPAAAQPSAEDS DTEDDSASPNIELVYREQHIRSW CMLGFVRSIALTPQVCGALSSP QWITLLMKVMKGHAPFPAASL | | | | | ĺ | | GVSATVLEATRKETAPVHLPVS |
| DGWIRVQWGTGSTNSYRMGK EGKYDLKLAELPAAAQPSAEDS DTEDDSASPNRLVYREQHRSW CMLGFVRSIALTPQVCGALSSP QWITLLMKVMKGHAPFPAASL | | | | | | | GPELAATMKIGTRVMRGVDW |
| EGKYDLKLAELPAAAQPSAEDS DTEDDSASPNRLYYREQHIRSW CMLGFVRSIALTPQVCGALSSP QWITLLMKVMKGHAFFFAASL | | | | | | | KWGDQDGPPPGLGRVIGELGE |
| DTEDDSASPNALTYREQHRSW CMLGFYRSIALTPQVCGALSSP QWITLLMKVMKGHAFFPAASL | | | 1 | | | | DGWIRVQWGTGSTNSYRMGK |
| CMLGFVRSIALTPQVCGALSSP QWITLLMKVMKGHAPFPAASL | | | | | | | EGKYDLKLAELPAAAQPSAEDS |
| QWITLLMKVMKGHAPFPAASL | | | | | | | DTEDDSASPNRLVYREQHRSW |
| | | | | | l | | CMLGFVRSIALTPQVCGALSSP |
| | | | | | | | QWITLLMKVMKGHAPFPAASL |
| | | | | | | | QRQRWVAVSLPHALVKSGTVP |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|----------|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | 1 | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | 1 | | sequence | | |
| 4353 | 34721 | Ā | 4394 | 266 | 1110 | WARGGCARNALASGNAIQGGK |
| 4555 | 34721 | <u>ا</u> | 17577 | 200 | 1110 | CNPGLFPPSPNRLVYREQHRSW |
| | | l | | | | CMLGFVRSIALTPQVCGALSSP |
| | | 1 | | İ | | OWITLLMKVMKGHAPFPAASL |
| | 1 | 1 | | | | |
| 1 | | 1 | | ŀ | | QRQLCPE/HTSCPVLKDFCKSVI |
| | | 1 | | | | TDVACSSLISTLLVFWGGLLHT |
| | | 1 | | l | | HKEASESWREAKSTSYVAAAR |
| | | 1 | | i | | ENEEDAKAEPPTPGIKPSDLVRL |
| | | 1 | | | | IHYQENSMGETAPMIQIISHWV |
| 1 | | | | ŀ | | PPTTHGIYGSTIQDEIRVGVSYP |
| | l | Į. | | ļ | | GHTDARGFQLLLVSGDFSIPYW |
| | | | | ŀ | | SLSSAYTSVNSSFVESLQSNLLK |
| | | | | | | GILLPATIMTDPRTTGHQ |
| 4354 | 34722 | Α | 4395 | 1 | 734 | MVQLSGKRILNSPYLELRCHQN |
| | | 1 | | | | MDHLGWVIKKSLNRSEVSWVP |
| 1 | | l | | | | GLEFPWGPKPFREVIAGPLLRN |
| | | 1 | | 1 | | NGQSLESSSLEGSHVGVYFSAH |
| | | 1 | | | | WCPPCRSLTRVLVESYRKIKEA |
| | | l | | 1 | | GQNF\EIIFVSADRSEESFKQYFS |
| i | | l | | l | | EMPWLA VPYTDEARRSRLNRL |
| | | l | | | | YGIQAHLFLTANAEDFDTTVQV |
| | | l | | ĺ | | NKIILITYRQNENSLSSLKTGET |
| | | l | | İ | | EAQGRLQGSPSNVRGHDPDRH |
| | | l | | l | | AIPLSVNRWNPSKSSPSPAVWS |
| 4355 | 34723 | Λ | 4396 | 195 | 1071 | LHEFDSSRDLTSGLGGARTHRR |
| | | l | | l | | LGGPSDAPRGLPAPPPAPPVRPG |
| | | l | | l | | /PRSPGPSAGTAR/DAPRPSVQM |
| | | l | | | | RAQRPARGSTKDLIETCCAAGQ |
| | | ļ | | | | QWAIDNDECLEIPESGTEDNVC |
| | | l | | | | RTAQRHCCVSYLQEKSCMAGV |
| | | ŀ | | | | LGAKEGETCGAEDNDSCGISLY |
| | | l | | | | KASLTCGLQGRCLNPQQASMG |
| | | ŀ | | ľ | | LFSYDVQSSKKINRSIQEKLGG |
| | ì | l | | | | HGVCAATPGGGMRNCGRLRRS |
| | | l | | | | GQRRGGTDRCEAVLTGLFTRA |
| | | l | | l | | LIREOMGDPHPLDHTGOLAKPL |
| | | l | 1 | l | | EVEKTPARWKYLDTNGEKEEP |
| | | l | | l | | ELRTQCPSLYED |
| 4356 | 34724 | A | 4397 | 1 | 520 | MMGEKAEKPDTKEKKPKAKK |
| 1 | T | ľ | | I | | ADAGGKRNCRYSRSAMYSRKT |
| | | ı | l | l | | TSRKKYSAAKSKVEKKKKFLA |
| | | l | | ĺ | | TVTKPVGVDKNSGTQVVKLHK |
| | | l | | | | MPRYYPTEDVPLKLLSHG/KKK |
| | | l | | | | PFSQHR/RRVVFLKQLV/SGTGP |
| | l | 1 | | l | | LVLNQVPLRRTHQKFVIATSTKI |
| | | l | l | İ | | GSSNVKIAKRLTGAYFKKVWK |
| | | 1 | l | l | | PKHOE |
| 4357 | 34725 | c | 4398 | 67 | 243 | LKIIQE |
| 455/ | 34123 | _ | 4370 | 107 | 243 | |

| SEO ID | SEO ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------------------|-----------------------------|--|
| NO: | of peptide | | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 4358 | 34726 | A | 4399 | 1 | 333 | QRSCIENILRAC/VGLPPQNHML |
| | | | | | | LEHKM\DAKRVGPVAATYPML |
| | | | | | | NKKGPVPAATNGCTGDANGHL |
| | | | | | | QEEPPMPTT*GPGHTVSRLFLPA |
| | | ļ. | | | | APHDPTLKAPTNNSAATQPSKN |
| | | ŀ | | | | KKK |
| 4359 | 34727 | Α | 4400 | 587 | 1013 | GAASAGRGPGPRAPGLWGRGP |
| | | l l | | | | AAAGASLVPTDHVHLSYNHLG |
| ļ. | | 1 | | ŀ | | NNDGENLSAP/SQFRSKEVSKS |
| l | | l | | | | NVVDD/MVQSNPVLYTPGEEPD |
| | | 1 | | | | HATRCWPHPSAGPSAADRAVP |
| | | 1 | | | l | ARPAGAPATEPHAPGTQNGAP |
| | | 1 | | | | GPSLKRVGPVAATYPI |
| 4360 | 34728 | Α | 4401 | 2 | 334 | |
| 4361 | 34729 | В | 4402 | 257 | 975 | |
| 4362 | 34730 | A | 4403 | 30 | 365 | EEAETVLVGQLKQLSSCLAVH |
| | | 1 | | 1 | i | KYRPETKQEKKQRLLARAEKK |
| | | 1 | | | | AAGKGDVPTKRPPVLRAGVNT |
| | 1 | 1 | | | | VTTLVENKKAQLV\CRKMGVP |
| | 1 | 1 | | | | YCIIKGKARLGRLVHRKTCTTV |
| | | | | | | AFTQVN |
| 4363 | 34731 | С | 4404 | 62 | 217 | |
| 4364 | 34732 | A | 4405 | 2 | 69 | |
| 4365 | 34733 | A | 4406 | 1 | 951 | GTRPKMPKGKKAKGKKVAPAP |
| | Ì | | 1 | | 1 | AVVKKQEGFRKKW*IPWFEKR |
| | ŀ | ļ | | | | P\KNFGIGQDIQPQKRPPPLL*K |
| | 1 | | | l | 1 | WPRQYQACSGQRAILYKR\LKV |
| | | 1 | | l | | PPAMKPVSPRALD\RQT\ATQLA |
| | | 1 | | | 1 | *AVAHKVQTQRQKQEKKQRL\ |
| | | | | l | ł | LARADEEGCLAKGDVPNERDP |
| | | | | l | ł | PVPSSQEFNPVSPPLVKEQEKLK |
| | | | | l | 1 | LVVNWHTDV\DPHPSLVCLPC/ |
| | | 1 | | l | 1 | LCPAPVS*KMGGPFTCIIQGKRA |
| | | | | l | 1 | RLWDRLVPQERPCTTCPPFT\QV |
| | | | | l | 1 | N\SEDKVRLLAKAGLEAIQGPIY |
| | 1 | | | | 1 | N*PDTMEIRPSLGVGNVLG\PKS |
| | | l | | l | | VARI\AKARNRHKAKETATHTG |
| | 1 | | | l | L | LNVTLLSFLYYKNN |

| SEQ ID NO: | of peptide | | SEQ ID NO: in USSN | location of first | codon for last amino acid | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide |
|---------------|------------|---|-----------------------|-------------------------------|---------------------------|---|
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \-possible nucleotide insertion) |
| 4366 | 34734 | Α | 4407 | I | 1392 | MPDVSEEQKESVCTGSMMREE |
| |) | | | 1 | | ESSRKGKVRTAGAKSSSSDRVP |
| | l | | 1 | | | RLNQEEVESLNRPITGAEIVAIIN |
| | | | | | | SLPTKKSPAPDGFTAEFYQRIRI |
| 1 | Į. | ŀ | | | | QQPIIRIQQPIKKLIQHDKVGFIP |
| | | | | 1 | | GMQGWFNICKSINVIQHINRTK |
| | i | | | 1 | | EKNHMIISIDAEKPFDK1QQCFM |
| | İ | | | | | LKTLNKLGIDGTYLKIIRAIYHK |
| | l | l | | 1 | | PTANIILNGQKLEAFPLKTGTRQ |
| 1 | l | 1 | | l | | GCPLSPLLFNIVLEVLARAIRQE |
| | | 1 | | | | KEIKGIQLGKEEVKLSLFADDM |
| | l | | | 1 | | IIYLENPTVSAQNLLKLISNFSK |
| 1 | | | | | | VSGYKINVQKSQAFLYTNNRQ |
| 1 | | 1 | | | | TESQIMSELPFTIASKRIKHLGIQ |
| | | ı | | | | LTRDVKDLFKENYKPLLNEIKE |
| ļ | | | | | | DTKKWKNIPCSWAGRISIMKM |
| | | | | | | AILPKVIYRFNAIPIKLPMTFFTE |
| | | 1 | | | | LEKTTLKFIRNQKRAHIAKSILS |
| | | | | | | QKNKAGGITLPDFKLYYKATV |
| | | | | | | TKTAWYWYQNRDIDQCTRTQP |
| | | | | | | \SEITPHIYNYLIF |
| 4367 | 34735 | Α | 4408 | 1 | 1947 | MALRRLSHDVSGALLLANGES |
| 1 | | | | | | TGNSGGSSGSSPSGGATSGSSQ |
| | | | | | l . | TSISGDVVEACCSVLSMVCADP |
| l | | | | 1 | , | VYKVYVAAL\QCMLLVTLEDPS |
| | | | | | | SHFTRMRRRLM/AYADEVEIAE |
| | į. | | | | l | AIQLGVEDTLDGQQDSF\CRHL |
| | | | | 1 | | FPTTIWKPQRTVP/LECTIHLEKT |
| | | | | | | GKGLCATKLSASSEDISERLASI |
| | l | | 1 | 1 | | SVGPSSSTTTTTTTEQPKPMVQ |
| | | l | | | ŀ | TKGRPHSQCLNSSPLSHHSQLM |
| | | 1 | 1 | | | FPALSTPSSSTPSVPAGTATDVS |
| 1 | | 1 | l | | | KHRLQGFIPCRIPSASPQTQRKF |
| 1 | | | 1 | | | SLQFHRNCPENKDSDKLSPVFT |
| 1 | | 1 | 1 | | | QSRPLPSSNIHRPKPSRPTPGNTS |
| | | l | 1 | | | KQGDPSKNSMTLDLNSSSKCD |
| | | l | 1 | | | DSFGCSSNSS/NCCYT\SDETVFT |
| 1 | | | 1 | | | PVEEKCRLDVNTELNSSIEDLLE |
| ŀ | | | | | | ASMPSSDTTVTFKSEVAVLSPE |
| | | l | | | | KAENDDTYKDDVNHNQKCKE |
| | | | | 1 | 1 | KMEAEEEEALAIAMAMSASQD |
| 1 | | | | | | ALPIVPQLQVENGEDIIIIQQDM |
| 1 | | | | l | | TFFRHIIPPIQWIYKKESANLLID |
| | | | 1 | 1 | | STGQRLRIADFGAAARLASKGT |
| | | | 1 | 1 | İ | GAGEFQGQLLGTIAFMAPEVLR |
| 1 | | | | | | GQQYGRSCDVWSVGCAIIEMA |
| 1 | | | | | | CAKPPWNAEKHSNHLALIFKKL |
| | | | 1 | | | LDFANTACDGDKESEVEDVET |
| 1 | | | | | | DSGNSPEDLRKEIMIGLQYQAEI |
| 1 | | | | | | PPYLGEYDGNEKDSPQPKKMT |
| | 1 | 1 | | I | l | GVQNAKEVLST |

| SEQ ID | SEQ ID NO: | Mct | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|----------|------------|-------------------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | |
| | sequence | 1 | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 4368 | 34736 | A | 4409 | 1 | 4485 | |
| 4369 | 34737 | A | 4410 | 2 | 927 | IDHMIGHKASLNKFKKIEIISSTI |
| | | i | | | | SGHNGIKLEINSKRDLQNHANT |
| | | | | | | RK\LNNLLLNEHWVKNEIKMEI |
| | | i | | | | LKFFELNDHNDTTYQNLWDTA |
| | | | | | | KATF\LLRGKFTALNAYIKKTEF |
| | | | | | | AQTDILRSHVKELEKQEQTKPK |
| | | | | | | PSRRKEITKIREELNEMETNKK |
| | | | | | | KIQKINETKSRFFEQINKIDRSLA |
| | | | | | | RLAKKRREKIQITSIRNKTGDTT |
| | | | | | | TDTTEIQKIIQGYYEHLYAHKLE |
| | | | | | | NLEEMDKFLEKYNPPSLNQEEL |
| ŀ | | | | | | DTLNRTITSNKIEMVIKKLPTKK |
| | | | | | | KSPGPNGFTAEFYQTFK\EELVP |
| | 1 | | | | | ILSILVHKTEKEGTLP |
| 4370 | 34738 | Α | 4411 | 405 | 517 | |
| 4371 | 34739 | Α | 4412 | 1 | 1197 | MEISELNAKLRSQEKEKQNEIIK |
| | 1 | | | | | LQLEKLQHFQEEKNKEIAILRN |
| | 1 | | | | | TIRDLEQRLSVGKDSHLKRENE |
| | | | | | l | QLKISADLIKEKLKSHEQEYKN |
| 1 | | | | | | NIAKLVSEMKIKEEGYKKEISK |
| | | | | | | LYQDMQRKGRIKVTCEWTCSE |
| | | | | | | RKTEGREPGPVREPTGRSQSAE |
| | | | | | | NEGSKTLAEINTKGTQSPAERIN |
| | | | | | | KIDRLLARLTNKRREKVQISSIR |
| | | i | | | | NKTGDIRTDTTEKQKFMQGYH |
| | | | | | i | EHLYMHKLENLKEMDKFLEIY |
| | | | | | | SPPRLKREDIETLSRPITISDIEM |
| | | | | | | KNLKIPPKLPELINKFSKVSRYK |
| Ì | | | | | | INVHKLVALLYANSDQTDNQIK |
| | | | | | | NSTHFTIVAKK\YLGIYLTKDM |
| | | | | | i | KDLHKENSK/PLLKEIIDDTIKW |
| 1 | | | | | | KHIPCSWMSTTNIVKMTILPKTI |
| | | _ | | | | YKFNAIIIKIPPSFFAERKKQS |
| 4372 | 34740 | Α | 4413 | 1 | 190 | MIQRKRASIGAPCAWVRKKEE |
| ļ | | | | | 1 | EEEEEEEEEEEEEEEKK |
| | | <u> </u> | | | | KKKKKKKERTTWLWGNPLT |
| 4373 | 34741 | A | 4414 | 303 | 429 252 | |
| 4374 | 34742 | A A | 4415 | 123 | 156 | |
| 4376 | 34744 | A | 4417 | 3 | 351 | EEEEEEEEEEEEE |
| 4370 | 34744 | ^ | 4417 | 3 | 331 | EEEEEEEEEEEEEEEEEE |
| | | | i | | | EEEE\KEEEEEEEEEEEEEE |
| | | 1 | | 1 | 1 | LGRLHGGSGKVRGLGFTENQQ |
| | | | | | 1 | GSTNRQHQREDNRKSKQKKIN |
| | | 1 | | | | NTKPEATESLIVNGITITAPA |
| 4377 | 34745 | A | 4418 | 1 | 192 | INTERTESTIVINGITTAPA |
| 4378 | 34746 | A | 4419 | 3 | 259 | |
| 4379 | 34747 | A | 4420 | ī | 279 | |
| 4380 | 34748 | В | 4421 | li . | 708 | |
| 4381 | 34749 | A | 4422 | 3 | 269 | |
| 1201 | 24147 | | . 144 | 1- | 1= | L |

| SEQ ID NO: | SEQ ID NO: of peptide sequence | | SEQ ID NO: in USSN 09/540,217 | Nucleotide location of first codon for peptide sequence | Nucleotide location of last codon for last amino acid of peptide sequence | Amino acid sequence (X-Unknown, *=Stop codon, /=possible nucleotide deletion, \-possible nucleotide insertion) |
|---------------|--------------------------------------|---|-------------------------------------|--|---|---|
| 4382 | 34750 | A | 4423 | 1 | 322 | MAGKQGRSEGASSWRLSSVLQ LNSQYFLQGAQQCTFLAATAW KKRKEEEEEEEEEEEEEEEEE EEEEEEEEEEEEKKKKKKK KKKKKK |
| 4383 | 34751 | В | 4424 | 327 | 674 | |
| 4384 | 34752 | A | 4425 | 494 | 960 | TRFYDHALHLIHRKGSTTVRSP PPLYFIGESKASALLAISLRWSG RSQPRSSVNQIRKAWGFRPRKG TEE/DERSGCPSDALESDDPMA YIIIFTAEGEVTFKSILFVPTSAP RGLFDEYGSKKSDYIKLYVRRV |
| 1 | - | | | | | FITDDFHDMMPKYLNFVKGVV |
| 4385 | 34753 | A | 4426 | 1 | 2539 | GGPRGWRCEDPNPGVGGGG SCDRRGLETHRPHAMRALWVL GLCCVLLTFGSVRADDEVDVD GTVEEDLGKSREGSRTDDEVV GREEAQLOLGLANSOGRELRE KSEKFAFQAEVNRMMKLINSL YKNKEIFLRELISNASDALDKIR LISLTDENALSORELTVKIKCD KEKNLHVTDTGVGMTREELV KNLGTLAKSGTSEFLNKMTEAQ EDGQSTSELIQGFGVGFYSAFL VADKVITSKHNDTOHIWES SDNEFSVTADPROTTCHGRGTTIT LVLKEEASDVLELDTIKNLVK YSQFINFPIYVWSSKTETVEEPM EEEEAAK EEKEESDDEAAVEEE |
| | | | | | | EEEKKPKTNKVEKTVWDWEL MNDIKPIWOPSSEVEEDEYAA FYKSFSKESDDPMAYIHFTAEG EVTFKISILFVPTSAPRGLIFDDY GSKKISDYIKLVVVRRIVFITDDF HDMMPKYLNFVKGVVJSDDL FLWSRETLIQOHKLLKVIRKL VP*NRWDMIKKI/SLDDKYNDT FWKEFGYQHISSLVVIEGPLRIR RTLAKLLRFQSSHHPTDUTSLD QYVERMKEKQOKIYFMAGSSK KEAESSPFVERLLKKGYEVIYL TEPVDEYGJQALPEFDGKRPQN VAKEGVKFDESEKTKESREAVE KEFEPLLNWMKDKALKDKIEK AVVSQRLTESPCALVASQYGW |

| SEO ID | SEO ID NO: | Met | SEQ ID NO: | Nucleatide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \-possible nucleotide insertion) |
| | | | | sequence | | |
| 4386 | 34754 | _ | 4427 | 2 | 622 | PARAALGILTSHOSGFLKTSTSK |
| 4380 | 34734 | Λ | 4427 | ^ | 022 | IT\STAWKN\KDITMQSTKQYAC |
| | i | | | ł | | LHDLTNKGIGEEIDNEHPWTKP |
| | | | ł | | | VSSENFT\SP\YVWMLDAEDLA |
| | | | l | | | DIEDTVEWRHRNVESLCVMET |
| l | | | | | | ASNESCS\TSGCFSKDIVG\LRTS\ |
| l | | | l | | | ACWQQHCASPAFAYCG\HSFCC |
| | | | | | | TGTALRTMSSLPESSAMW*KKP |
| | | | | | | ARTRLPRGKDLIYFGSEKSDOE |
| | | | | 1 | | TGTLLLPVSS |
| 4387 | 34755 | A | 4428 | 2 | 1421 | OHCSOKDTAELLRGLSLWNHA |
| 4387 | 34733 | ^ | 4420 | 2 | 1421 | EERQKFFKYSVDEKSDKEAEVS |
| | | | | | | EHSTGITHLPPEVMLSIFSYLNP |
| | | | | | | QELCRCSQVSMKWSQLTKTGS |
| | | | | | | LWKHLYPVHWARGDWYSGPA |
| | İ | | | | | TEL\DT\EPDDEWVKNR\KDESR |
| | | | | | | AFHEWDEDADIDESEESAEESI |
| | | | | | | AISIAQMEKRLLHGLIH\NVLPY |
| | | | | | | VGTSVKTLVLAYSSAVSSKMV |
| | | | | | | RQILELCPNLEHLDLTQTDISDS |
| 1 | | | | | | AFDSWSWLGCCOSLRHLDLSG |
| | | | | | 1 | CEKITDVALEKISRALGNSGHL |
| | | | | | | HOSGFLKTSTSKITSTAWKNKD |
| | | | | l | | ITMQSTKQYACLHDLTNKGIGE |
| | | | ł | | | EIDNEHPWTKPVSSENFTSPYV |
| l | | | | | | WMLDAEDLADIEDTVEWRHR |
| | | | | | | NVESLCVMETASNFSCSTSGCF |
| | | | | | | NHRPWSQNEYEQLNYAKQLKE |
| | | | | | | RLEAFTRDFLPHMKEEEEVFQP |
| | | l | | ļ. | | MLMEYFTYEELKDIKKKVIAQ |
| | | l | | | | HCSOKDTAELLRGLSLWNHAE |
| | | l | | | | EROKFFKYSVDEKSDKEAEVS |
| 4388 | 34756 | В | 4429 | 70 | 348 | |
| 4389 | 34757 | Α | 4430 | 2 | 371 | |
| 4390 | 34758 | Α | 4431 | 1 | 907 | MGHRINIVCKIDAPCARQTRTF |
| | | i i | | | | HPVVKTVEDCGRYPSVIEFGKY |
| 1 | | l | | | | EIQTWYSSPYPQEYARNLAKEG |
| 1 | | l | | | | KMGEREMSFVQQLQPMSGRCS |
| 1 | | 1 | | | | LF\RELSSCTYLLNTQPP/AVSIH |
| 1 | | l | | | | FLAVWIILLVDGNMSKIYCQNL |
| | l | l | l | 1 | | CLLAKLFLDHKTLYYDVEPFLF |
| | | l | | 1 | | YVLTKNDEKGCHLVGYFSKWT |
| | | 1 | l | 1 | | VLQGQWQVQGIAHFSRALTYLI |
| | | l | | l | | CFSFPQEKLCQQKYNVSCIMIM |
| 1 | | l | l | 1 | | PQHQRQGFGRFLIDFISFPRLTIG |
| | 1 | | | | | ASFTQLRKQSMSNST\EIPLLGD |
| 1 | | 1 | | 1 | | NGKSSPTFHWQSLTSSPNAHFS |
| | | 1 | | 1 | | LEAQLSILGHLFQSP |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X-Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 4391 | 34759 | IA | 4432 | 1 | 3468 | MGKKONRKTGNSKNOSASPPP |
| | | | | | | KERSSSPATEOSWMENDFDELR |
| | | | l | | | EEGFRLSNYSELPEDIOTKGKE |
| | | | 1 | | | VENFEKNLEECITRITNKRNFKP |
| | | | 1 | | | TKIKRDKEGHYIMVKGSIOOEF |
| | | | | | | LTILNIYAPTGAPRFIKOVLSDR |
| | | | | | | QRDLDFHTLIMGDFNTPLSTLD |
| | | | | | | RSTRQKVNKDTQELNSALHQA |
| | | | | | | DLIDIYRTLHSKSTEYRFFSAPH |
| | | | | | | HTYSKIDHLLGSKAFLSKCKRT |
| | | | | | | EIITNYLSDHSAIKLELRIKNLTO |
| | | | | 1 | | NRSTTWKLNN |
| 4392 | 34760 | Α | 4433 | 3 | 1900 | FNKCMTLKFRLKNFSRINKIDTE |
| | | | | | | LARLIKKKREKNRIDTIKNDKG |
| | | | | | | DITSNPTEIQSTIREYYKHLYTN |
| | | | | | | KLENLEEMDKFLDTYTLPRLNÇ |
| | | | | | | EEVESLNRPITGSEIMAIINSLPT |
| | | | | | | KKSPGPDGFTAKFYQRYKEELV |
| | | | | l | | PFLLKLFQSIEKEGILPNSFYEAS |
| | | | | | | IILIPKPGRDTTKNENFRPISLMN |
| | | | | 1 | | IDAKILNKILANRIQQHIKKLIH |
| | | | | | | HDQVGFIPGMQGWFNIRKSINV |
| | | | 1 | | | IQHISRTKDKNHMIISIDAEKAF |
| | | | | | | DKIQQPFMLKTLNKLG\IKYLGI |
| | | | | | | QLTRDVKDLFKERS/YEPLLNEI |
| | | | | | | KEDTNKWKNIPCSWVGRINIVK |
| | | | | | | MAILPKVIYRFNAIPIKLPMTFF |
| | | | | | İ | TELEKTTLKFIWNQKRALIAKSI |
| | | | | ŀ | | LSQKNKAGGITLPDFKLYYKAT |
| | | | | | | VTKTAWYWYQNRDIDQWNRT |
| | | | | | | EPSEITLHIYNYLIFDKPEKNKQ |
| | | | | | | WGKDSLFNKWCWENWLAICR |
| | | | | | | KLKLDPFLTPYTKINSRWIKDL |
| | | | | | | NVRPKTIKTLEENLGITIQDIGM |
| | | | | | | GKDYMSKTPKAMATKAKIDK |
| | | | | l | | WDLIKLKSFCTAKETTIRVNRQ |
| | | | | 1 | | PTKWEKIFATYSSDKGLISRIYN |
| l | | ĺ | | | | ELKQIYKKKTNNPIKKWVKDM |
| | | | | | | NRHFSKEDIYAAKKHMKKCSP |
| | | | | l | | SLAIREMQIKTTMRYHLTPVRM |
| | | | | | | AIIKKSGNN |
| 4393 | 34761 | Α | 4434 | 2 | 1932 | |

| SEQ ID SEQ ID NO: of peption sequence | e hod | SEQ ID NO: in USSN 09/540,217 | location of first | Nucleotide location of last codon for last amino acid of peptide sequence | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide deletion, \-possible nucleotide insertion) |
|---|-------|-------------------------------------|-------------------|---|--|
| \$394 \$394 \$394 | A | 4435 | | 2571 | IMKAEIKMFFETNENKDTTYON LWNTFKAMCRGKFIALNAHKR KQERSNTDTLTSQLKELKKQEQ THISKPSRRQEITKIRAEMKEIET GKTLQKIKESRRQEITKIRAEMKEIET GKTLQKIKESRRYEFFEKNIKID LLARLTKKKREKNQIDAIKNOK GDITTDPTEIQTTIREYYKHLYA NKLENLEEMDKFLDTYTTPRIN QEEVESLNRPITGSEIEAIINSLP TÜKKCPGPDGFTAEFYRRKRGI LPNSYEASIILIPKPGTDTTKKE NFRPISLMNIDVKILNKLLANI QQHIKKLIHHDQVGFIFGMQG WFNIKKSINIQHINRAKDKNH MISIDAEKAFDKIQQCPHLKTL NKLGIDGTYLKIIRAYDKPTAN HILMGQKLEVPELKTGTRQGCPL SPLLFNIVLEVLARAIRQEKEIK GIQLONEEVKLSLFADDMIVYL ENPISLAPNILKLINNFSKGSAY KIKVQKSQAFLYTNNRQTESQI VIKRNALIKLENPISKOSAY KIKVQKSQAFLYTNNRQTESQI VIKRNALIKLENPISKOSAY KIKVQKSQAFLYTNNRQTESQI VIKRNALIKLENPISTEPELKST LKFIWNQKKLYBLKEIKEDTNK WKNIPCSWVGRINKMALIPK VIKRNALIKLENPTFFTELEKST LKFIWNQKRABIAYSKISQKNK WKNIPCSWVGRINKMALIPK VIKRNALIKLENPTFFTELEKST LKFIWNQKRABIAYSKISQKNK WKNIPCSWVGRINKMALIPK HINYNLIFICKPENKWQWGKDS LFNKWCWENWLAICRKLKLDP FLTPYTKINSRWIKDLHVRKYKL |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 4395 | 34763 | Α | 4436 | 1 | 1965 | MTLESEQTFVYAVTATQTGAK |
| | | | | | | EGTRMSKSNVAGQQGDSGEKA |
| | 1 | | | | | LQKTYQKILREKESALEAKYQA |
| | | | | | | MERAATFEHDRDKVKRQFKIF |
| | i | | | | | RETKENEIQDLLRAKRELESKL |
| | İ | | | | | QRLQAQGIQVFDPGESDSDDNC |
| | | | | | | TDVTAAGTQCEYWTGGALGSE |
| | | | | | | PSIGSMIQLQQSFRGPEFAHSSID |
| | | | | | 1 | VEGPFANVNRDDWDIAVASLL |
| | İ | | | | | QVTPLFSHSLWSNTVRCYLIYT |
| | | | | | | DETQPEMDLFLKDYSPKLKRM |
| | | | | | | CETMGYFFHAVYFPIDVENQYL |
| | | 1 | | ŀ | | TVRKWEIEKSSLVILFIHLTLPRI |
| | İ | 1 | | l | | KYLGIQLTRDVKDLFKENYKPL |
| | | 1 | | 1 | | LNEIKEDTNKWKNILCSWTGR |
| | | 1 | | ł | | NNVMKMATLPKVIYRFNAIPIK |
| | | ĺ | | | | LPMTFFTELEKTTLKFIWNQKR |
| | | | | | | AHIAKTILSEKNKAGGIMLPDF |
| | | l | | | | KLYFKATVTKAAWYWCQNRD |
| | | | | | | IDQWNRTEASEITPHIYNHLIFD |
| | | | | l | i | KPDKNKKWGKDSLFNKWCWE |
| | | | | | | NWLAICRKLKLDPFLTPYTKIN |
| | | | | | | SRWIKDLNVRPKTIKTLEENLG |
| | | 1 | | | | NAIQDIGMGKDFMTKTPKAMA |
| | | | | | | TKAKIDKWDLIKLKSFCMAKET |
| | | | | 1 | | PIGVNRQLTEWEKIFAIYPSDKG |
| | | | | | | LISRIYKELKQTYKKKTNNPIEK |
| | | l | | | | LAKEMNRHLSKEDIYAANRHK |
| | | 1 | 1 | | | KKCSSSLVIREMQIKTT/MRYHL |
| | | | | | | TPVRMAIIKKSGNNRCWRGCG |
| 4396 | 34764 | Α | 4437 | 300 | 476 | PDLSLWLPLTFFPSFQLW*I*QL |
| | | | | l | | CVLELLFSRSIFVAFSVFPEFES |
| | 1 | | | l | | WPALLGWGSSPG |

493

| sc | of peptide equence | A | in USSN 09/540,217 4438 | location of first codon for peptide sequence | codon for last amino acid of peptide sequence 1689 | "">Sing odon, "possible nucleotide deletion, "possible nucleotide insertion) QKLYKPERIKYLGIQLTRDVKD LFKENY/KLNEIKEDTNKRKNIP SWYGKINIKMAILQKVIYRF NAIPIELPITFTKLEKTTLRFIW NKKRVHIAKSIPSKKNKAGGIM LPDFKLYYKATITKTAWYLYQ |
|---------|--------------------|---|-------------------------------|--|--|--|
| | | A | | sequence | | QKLYKPERIKYLGIQLTRDVKD LFKENY/KLNEIKEDTNKRKNIP CSWVGRINILKMAILQKVIYRF NAIPIELPITFFTKLEKTTLRFIW NKKRVHIAKSIPSKKNKAGGIM |
| 4397 3 | 4765 | A | 4438 | L | 1689 | LFKENY/KLNEIKEDTNKRKNIP CSWVGRINILKMAILQKVIYRF NAIPIELPITFFTKLEKTTLRFIW NKKRVHIAKSIPSKKNKAGGIM |
| 4397 3 | | A | 4438 | 413 | 1689 | LFKENY/KLNEIKEDTNKRKNIP CSWVGRINILKMAILQKVIYRF NAIPIELPITFFTKLEKTTLRFIW NKKRVHIAKSIPSKKNKAGGIM |
| | | | | | | CSWVGRINILKMAILQKVIYRF NAIPIELPITFFTKLEKTTLRFIW NKKRVHIAKSIPSKKNKAGGIM |
| | | | | | | naipielpitfftklekttlrfiw nkkrvhiaksipskknkaggim |
| | | | | | | NKKRVHIAKSIPSKKNKAGGIM |
| | - | | | | | |
| | | | | | | LPDFKLYYKATITKTAWYLYQ |
| | · | | | | | |
| | | | | | i | NRDIDQWNRTEALGITPHIYNH |
| | - | | | | | LIFDKPDKNKQRGKDSLFNKW |
| | | | | | | CWENWLVICRKLKLDAFLTPY |
| | | | | i | | TKINSRWIKDLNIRPKTIKTLEE |
| | | | | | | NLGNTIQGIGMGKDFMTKTPK |
| | - 1 | | | | | AMATKAKIDKRDLIKLKSFCTA |
| | | | | | | KETNIRVNROPIEWEKIFAIYRS |
| | - 1 | | | | | DKGLISRIYKELKOIYKKKTNN |
| | | | | | | SIKKWAKDMNRHFSKEDIYAA |
| | | | | | | NRHEKKWSPSLVTREMOIKTIM |
| | | | | | | RYHLTPVRIMTIKMSGNNRCW |
| | | | | | | RGYGEIGMLLHCWWECKLVO |
| i | | | | | | ALWKTVWRFLKDLELEIPFDPV |
| | | | | | | IPLLGIYPKDYT |
| 4398 34 | 4766 | Α | 4439 | 3 | 2404 | |
| 4399 34 | 4767 | Α | 4440 | 1 | 1572 | MLVSFVSLGSLCLQPGSQTLLE |
| | | | | | | KNRTVKPHVSFTLLPALSHVSE |
| | | | | | | KNEAESMNSLIPPPPNLHTPAQ |
| ı İ | Į | | | | | APFPLPTKEQDRSSSPATEQSW |
| | 1 | | | | | TENDFDELTEVGFRRSVITNSSK |
| ı İ | ì | | | | | LKEDVRTHCKEAKNLEKRLHE |
| | | | | | | WLTRINSVEKTLNDLKLKSMA |
| ı İ | | | | | | RELHDTCTSFNSRFDQVEERVS |
| | | | | | | AIEDQTNEINNGENGTKLENTL |
| | | - | | | | QDIIQENFPNLARQANIQIQEIRR |
| | | | | | | TPQRYSSRKATPRHIIVRFTKVE |
| | | | | | | MKEKVLRAAREKVLEVLARAI |
| 1 | | | | | | SQEKEIKCTQLGKEEVKLSLFA |
| | | | | | | DDMIVCLENPVVSDHNVLKLIS |
| | į | | | | | NFSKVSVYKINVQKSHAFLYTN |
| | | | | | | NRQTESQIMSELPFTITTKRIKY |
| 1 | | | | | | LGIQLTRAVKDFFKEKYKPLLN |
| | | | | | | EIKKDTNKWKNIPCSCIGRINIM |
| | | | | | | KMAIVPKVIYGFNAIPIKLPRTF |
| | | | | | | FTELEKTTLKFIWKKKGAKTILS |
| | | | | | | IKNKAGGIMLPDFKLYYKATVT |
| | 1 | | | | | KIAWYWYQNRYINQRNRTETS |
| | 1 | | | | | EITSHIYNHL/IFDKPDKNKKWG |
| | | | | | | KDSLFNKWCWENWL |
| 4400 34 | 4768 | В | 4441 | 1 | 1558 | |

| SEQ ID | SEO ID NO: | Met | SEO ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 4401 | 34769 | Α | 4442 | 837 | 4329 | TWKGTTDRSTRQKVNKDTQEL |
| | | | | | | NSALHQADLIDIYRTLHPKSTE |
| | | | | | 1 | YTFF/LAPHHTYSKIDHIVGSKA |
| | | | | | | LLSKCKRTEIITNYLSDHSAIKL |
| | | | | | | ELRIKNFTQSRSTTWKLNNLLL |
| | į. | | | | | NDYWVHNEMNAEIKMFFETNE |
| | | | | | | NKDTTYONLWDAFKAVCRGK |
| | | | | | | FIALNAHKRKQERSKIDTLTSQL |
| | | 1 | | | | KELEKQEQTHSKASRRQEITKIR |
| | | | | | | AELKEIETQKTLQKINESRSWFF |
| | 1 | | | | | ERITKSDRPLARLIKKKREKNOI |
| | | l | | l | | DTIKNDKGDIT |
| 4402 | 34770 | Α | 4443 | 1 | 816 | MRRDYPVKAFTSRKREQHVQK |
| | | | | | | VPSKKSRQVQRTERRFLETTPD |
| | | | | | | LLYQKEKDLLLISSSKKQPRPGI |
| | | 1 | | | | ERHYMMTQGSIHQEDVAILK/V |
| | | | | | 1 | YTSNKRASKYIQQ/TLLEIKGKI/ |
| | | | | | | AHPQIVGDFNTPTSTIDRTIRQQI |
| | | | 1 | | | SIEFYDTIKQWDLTDTCRTGHPI |
| | i | 1 | | | | TEYIFCSGAHLTFTKINHIQGPK |
| | | | į | | 1 | RILKRFKRIEHECVLVLKGCQA |
| ĺ | | 1 | 1 | | | KNRKKEEDLQTYWMLNIYGPH |
| | | 1 | | | | YRSGSYAAIHRQETICSGQLSQ |
| | | 1 | i | | | ALRDRFAMNAKLLLSLAAHLW |
| | | | | | | VIKLDFM |
| 4403 | 34771 | Α | 4444 | 87 | 307 | |
| 4404 | 34772 | Α | 4445 | 1 | 534 | MEESRGAKPPPALLPGDATLPP |
| | | | | | | GSLGSARHPPEP/RPVPGP/PPHQ |
| | | | | | | TCPGPSACSSRRPEPRSSPGSPA |
| | | | | | | RAPPAPPPPAAPAPRCEPPLWLL |
| | | 1 | | | | LRVPCPGRSGWSWMTT*I/SERP |
| | | | | | | VQKRARSGPQPRLPPCLLPLSPP |
| | | 1 | | | | TAPDRATAVAT\PPVLGPMSSW |
| | | l | | | | SPRRAGGPTRPCTALQALSIPA |
| 4405 | 34773 | A | 4446 | 164 | 660 | YPSGRRLREPADVADA WDGME |
| | 1 | ľ | 1 | 1 | 1 | ESRGAKPPPALLPGDATLPP\AP |
| | | 1 | | l | | SGOLGTRPSPPSSRPSPHOTCPG |
| | | 1 | | 1 | | PSACSSRRPEPRSSPGSPARAPP |
| | | 1 | | 1 | | APPPPAAPAPRA/SPRRPLPAPRS |
| | | | | | | ASVPAFSAPPSQWPEVGPSPCA |
| | | | | | | LRRAMPRGPGPPPEPRLVAEPG |
| | | | | 1 | | EDAAPTAGR |
| 4406 | 34774 | Α | 4447 | 1 | 417 | |
| | | | | | | |

| SEQ ID NO: | SEQ ID NO: of peptide sequence | | SEQ ID NO: in USSN 09/540,217 | location of first | Nucleotide location of last codon for last amino acid of peptide sequence | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
|---------------|--------------------------------------|---|-------------------------------------|-------------------|---|--|
| 4407 | 34775 | A | 4448 | 1 | 1802 | MSYPADDYESEAAYDPYAYPS DYDMHTGDPKQDLAYERQYE QQTYQWIPEVIKNFIQYFIKITVS DLIDQKVYELQASRVSSDVIDQ KVYELQDIYENSWTKLTERFK NTPWPEAEAIAPQVGNDAVFLI LYKELYYRHIYAKVSGGPSLEQ RFESYYNYCNLFNYILNADGPA PLELPNOWLWDIIDEFIYOFQSF SQYRKCTAKKSEEDIDLRSNN KIWNYHSVLNVLHSLVDKSNIN RQLEVYTSGGDPESVAGEYGR HSLYKMLGYFSLVGLIRLHSLL GDYYQAIKVLENIELINKSMYS RYPEQQVITTYYVGFAYJLMMR RYQDAIRVFANILLYIQRTKSM FORTTYKYEMINKONEQMHAL LAIALTMYPMRIDESIHLQLREK YGDKMLRMQKGDPQVYELF SYSCPKELISVVPNYDNYHPY YHKEIPFLQVLKGVF*SSQQ AQLSTPIRSFLKLYTTIMPIVAK LAGFPGPQSGFFRIFGFFFFKQ QDERTSWWTQRVFSAPGWFNF |
| | | | | | | SQASEVDF\YI\DKDMI\HIADTK VA\RRYG\DFFIRQI\HKF\EELNR TLKEGWGQRPWMIFHTHFREP GFECIIGQGSVFC |

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| SEQ ID | SEQ ID NO: | | SEQ ID NO: | | | Amino acid sequence (X=Unknown, |
|--------|------------|-----|-----------------------|-------------------------------|---------------------------|--|
| NO: | of peptide | hod | in USSN 09/540,217 | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | L | | | | L |
| 4408 | 34776 | Α | 4449 | 1 | 1722 | MNIKAKILNKILANRIQQHIKKL |
| | | i | | | | IHHDHVSFIPRMQGWFNIHKPIN |
| | | | | | | VIHHINRTNDKNHMIISIDAEKA |
| | | | | | | FDKIQHPFTLKTLNKLDDMTVY |
| | | | ļ | İ | | LENPIVSAQNLLKLISNFSKVSG |
| 1 | | | | | | YKINVQKSQAFLYTNNRQTESQ |
| | l | | | | | IMSELPFTIASKRIKYLGIQLTRD |
| 1 | | | | | | VKDLFKENYKPLLKEIKEDTNK |
| | | | | | | WKNIPCSWVGRINVVKMAILP |
| i | 1 | | | | | KVIYRFNAIPIKLPMTFFTELEK |
| | | | | | | TTLKFIWNQKRARIAKSI\LSQK |
| | | | | | | NKAGGITLPDFKLYYKATVTKT |
| 1 | | | | | | AWYWYQNRDIDQWNRTE\PSEI |
| 1 | | | | | | MPHIYNHLTFDKPDKNKQWGK |
| | | | | | | DSLFNKWCWENWLAICRKLKL |
| 1 | | | | | | DPFLTPYTKINSRWIKDLNVRP |
| | | | | | | KTIKTLEENLGNTVQDIGMCKD |
| ŀ | | | | 1 | l | FMTKTPKAMATKAKIDKWDLI |
| l | | | | | ľ | KLKSFCTSKETIIRVNRQPTEWE |
| | İ | | | | | KMFAIYPSDEGLISRICKE/LFKQ |
| 1 | | | İ | | | IYKKKNHPIKKWAKDMNRHFS |
| 1 | | | | | | KEDIYVANKHMKKSLSSLVIRE |
| | 1 | | i | | | MQIKTTMRHHLTPVRMTIIKKS |
| | | | | l | | GNNRFWRGCGETGMLLHCWW |
| l | 1 | | 1 | | | ECKLVQPL*KIVW*FLKDLESEI |
| | | | | | | PSDSAIPLGGIHPKAYKSFYY |
| 4409 | 34777 | Α | 4450 | 1050 | 1147 | PGEWHGQGSPRCWR*PLPQRC |
| | | | | | | GHLLSCRWRTP |
| 4410 | 34778 | Α | 4451 | I | 614 | MEELVDEGLVKALGVSNFSHF |
| | | | | | | QIEKLLNKPGLKYKPVTNQNSL |
| | | 1 | | | | GTMQNRAGFPRDEDCLLLQVE |
| | | l | | | | CHPYLTQEKLIQYCHSKGITVT |
| | | 1 | | 1 | | AYSPLGSPDRPWAKPEDPSLLE |
| | | | | | | DPKIKEIAAKHKKTAAQVLIRF |
| | | 1 | | | | HIQRNVIVIPKSVTPARIVENIQN |
| | | 1 | | l | | TEHYKYCGLCVGPNLEKNLYP |
| | | 1 | | | | VDRM/WKNSCGQFVL*ISSHLE |
| | | _ | | | | DYPFNAEY |
| 441I | 34779 | Α | 4452 | 2 | 240 | WMELESLSHFQIEKLLN/KPGL |
| | | | | I | | KYKPVTNQVNSIQFKGSILEEGI |
| l | 1 | | l | I | | VNMGDDSSMHVSAPEDPPVGQ |
| L | L | L | L | | | DVEAEDSDTDDPDPV |
| 4412 | 34780 | Α | 4453 | 1 | 1019 | |
| 4413 | 34781 | Α | 4454 | I | 2028 | |

| SEQ ID | SEO ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|----------|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | Ì | 09/540,217 | eodon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | ŀ | | sequence | | |
| - | | <u> </u> | | L | 1 | |
| 4414 | 34782 | Α | 4455 | 3 | 1045 | DFTSENFSAAWYLIENHSNTSF |
| | | | | | | EQLKMAVTNLKRQANKKSEGS |
| | | | | | i | LAYVKGGLSTFLEAQDALSAIH |
| 1 | | | l | | | QKLEADGTEKVEGSMTQKLEN |
| 1 | | | | | ŀ | VLNRASNTADTLFQ/EKVLGRK |
| | | | | | i . | DKADST\RNALNVL\QRFKFLFN |
| 1 | | | | | | LPLNIERNIQKGDYDVVINDYE |
| 1 | | | | | | K\AKSLFG\KTEVQVF\KKYYAE |
| 1 | | | | | | V\EPRVEALRELLL\DKLLETPST |
| 1 | | | l | , | | LHDQKRYIRYLSDLHASGDPA |
| 1 | | | | | 1 | WQCIGAQHKWILQLMHSCKEG |
| | 1 | | | | | YVKDLKGKDFSSNVFQFSGSAL |
| | | ŀ | | | | RRVPDTVRVLDSQFSRSALRSV |
| | | | l | | | PDTVQVLDSQFSGSALRRVPDT |
| | | 1 | | | | VRVLDGQFSRSALRSVPDTVRV |
| 1 | | ł | ł | | | LDKCHCSPAKVVMNAVTIFTG |
| 4415 | 34783 | A | 4456 | 1 | 440 | MQRNLARAFSPGIKKIKMMCL |
| | | 1 | ļ | | | GNSEKDWPKFRGVGEDAGLLA |
| | | | | | l | ARECGALLVIRHLINAVRAIVP |
| | | | | 1 | | NKSNNEIILVLQHFDNCVDK\TV |
| | | ł | | ł | l . | QAFMEGSASEVLKEWTVTGKK |
| | | 1 | | | | KLLLQGEEELARLPFITGGSGSC |
| | | | | 1 | | YSSSTLAVEEECRVLA |
| 4416 | 34784 | Α | 4457 | 1 | 276 | MEDEMEGLTEAGFRRWYTTNS |
| | | ł | | 1 | | AELKEHVLTQCKEAKNLDKRL |
| | | | | | | EELLSRITSLERDISDQME/RELC |
| | | | | 1 | | EAYTSINSQINQAEERISEFEDH |
| 1 | | 1 | | | | LAEI |
| 4417 | 34785 | Α | 4458 | 3 | 361 | EMVHRKKKAVHRTATADDKK |
| | | 1 | | | | LQFSLKKLEVNNVSGIEEVNMF |
| | | | | | | TNQGTVIHFN\AEMPANSFTITG |
| | | 1 | | | | HAETKQLMEMLPSILNQLGAH |
| | | i | | | | CLTSLRRLAEALPKQSVNGKAP |
| | | | | | | LATGEDDDEVPA |
| 4418 | 34786 | Α | 4459 | 1 | 475 | |
| 4419 | 34787 | Α | 4460 | 57 | 820 | EDGSGGGKFPEGARQGGTGQR |
| | | | i . | | | RRRKAMRRTGAPAQADSRGRG |
| | | | İ | | | RARGGCPGGEATLSQPPPRGGT |
| | | | | | | RGQEPQMKETIMNQEKTRHTC |
| | | l | | | | RAQ\VRIGGKGTARRKKKVVH |
| [| | | l | | | RGAAS/ADDKKLQF\SLKK\LGV |
| 1 | | | l | I | | NNISGIE\EVNM\FTN\QGTSGST |
| | | 1 | | l | | FNNP*KFQGISWPANTFHHLQG |
| | | 1 | | Į. | | HAEDKGS*QEMLAQHLKPSLG |
| | | | | l | | ADSLTSLRRLAEALPKQSVDGK |
| | | | | | | APLATGEDDDDE\VPDLV\ENF* |
| | | 1 | l | I | | *RLPRNEANLNLSQLLKIKP |
| 4420 | 34788 | A | 4461 | I | 1527 | |
| | | | | | <u> </u> | L |

| SEQID NO: | SEQ ID NO: of peptide sequence | Met hod | SEQ ID NO: in USSN 09/540,217 | Nucleotide location of first codon for peptide sequence | Nucleotide location of last codon for last amino acid of peptide sequence | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleatide deletion, \=possible nucleatide insertion) |
|--------------|--------------------------------------|------------|-------------------------------------|--|---|--|
| 4421 | 34789 | А | 4462 | 8 | 327 | LIWQLTFTKTIKS/CEEYGKIVST KAILDKNTNQCKGMCKGIRTL KSCLCYLINGSSIVEVQKRLAY AGTLEPSLVHQVYSELSYYKLP GTQVVRIIAEVLRMQDSSE |
| 4422 | 34790 | А | 4463 | 2 | 573 | WMEGREKWRGRRKDGRKEGR KEGRKERREREERGRERK/GKE KKGKERKGKERKGKERKGRER KGTEGKGTEGKGERKGKEGK GKERKGKERKGKERKGKEGKG KEOKGKERKGKERKGKERKGKE ERKGKERKGKERKGKERKGK |
| 4423 | 34791 | В | 4464 | 1 | 1344 | |
| 4424 | 34792 | Α | 4465 | 3 | 373 | |
| 4425 | 34794 | ^ | 4467 | 3 | 3864 | MQWEEAEKDPSGSCVFGRPPV ALVFPLHSKWTLVNSPPSSGDP YVPGRPAGSGQLSLSPAPPV VL PGPGKIKQAGNNPSLTSIVRSEV FCAHRHLHPPOLVCARGHIGA HLSVDRGSLIWEVLESTVWART NEWSPVTRTVLISALASTHIPOP CESRPPVPPEVEVTVLRSQGTA QLPPWSSTSWRLTDPSCPKHA AWLTDLASSKGPAAGGTGSFS QPGTLTSTRTPLKKEKSPEDL KQIKIDLGKFSDN |
| 4426 | | Α | | | | |
| 4427 | 34795 | Α | 4468 | 396 | 676 | LCFPYAERPDLQFLC*DLCARSP YLLQAQKYLQEF*AIPHLDQQT EPPDPSVSFYLLDCTLNCTAQH KTC*KKSIGL*EQNQQTLSSIPY SHT |
| 4428 | 34796 | A | 4469 | | 858 | MEWEDNI.PLEIGRTVAKLLSD HSQTPIGIQMFLIFSLS.IKALSD LVCLSYLFNFRFTLESEVQHLSG ATILTA WFKIPFLGIREAKSPRS ENTRLATILEAGHRHLGTSVSK DHFVTFWRFRRDLQSDLKQIKI DLGKFSDNPDGYIDVLQELGQS FDLTWRDIMLLLNQTLTFNERS ATITIA AREFOLWYISQVVAAV AGLYSEAVKIIGOLTVWTSHD VNGILTAKGDLWLSDHLLKY QALLLEGFVLRRTCATLNPAT FLPDNEKEKHNCQVIAQTYA |
| 4429 | 34797 | Α | 4470 | 918 | 1939 | |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| ŀ | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| | | ╄ | | | | |
| 4430 | 34798 | Α | 4471 | 3 | 2693 | PQVCLTIESQEVNCLLDAGAAF |
| | 1 | i | | ł | | SVLLSCPGQLSSRSVTIRGVLG |
| | 1 | | | ì | | PVTRYFFQPLSCDWGALPFSHA |
| | | 1 | | | | FLIMPESLTPLLEREILVKAGAII |
| ł | · | 1 | | i | | HLNIGEGTPICRLLFEEGISPEV |
| | | 1 | | | | WATEGQYGQAKNAHFVQVKL |
| | l | 1 | | | | KDSTSFPYQRQYPLRPEAQQRL |
| | l | 1 | | | | QKIVKDLKAQGLVKPYSSPCNT |
| | | 1 | | | İ | PILGVQKPKRQWRLVQDLRIIN |
| | | | | i | | EAVFPLYPAIPSPYTLLSQIPEEA |
| | | | i | | | EWFTVLDLKDAFFCIPVHPDSO |
| | 1 | | | | | FLFAFEDPSNPTSQLTWTVLPQ |
| | 1 | | | l | | GFRDSPHLFGQALAQDLSQFSY |
| | 1 | | | | | LDTPVLOCMDDLLLAARSETLO |
| 1 | 1 | 1 | | 1 | | HQATQALLNFLTTCGYKVSKP |
| | i | 1 | | 1 | | KAQLCSQQVKCLGLKLSKVTR |
| | | 1 | | | | ALSEERIOPILAYPYPKTLKOLR |
| | | 1 | | ŀ | | GFLGITGFCRIWIPRYGKIARPL |
| | 1 | 1 | | | | YTLIKETQKANTHLVRWTPEAI |
| | | | | | | AAFHALKKALMOAPVLSLLTG |
| | ı | 1 | | 1 | | |
| 1 | 1 | 1 | | į. | | QDFSSYVTKNKQTKKKK\T*IA |
| | ı | 1 | | | | LRVLALV*GTSLQPVAYLSKKT |
| | 1 | 1 | | | 1 | DVVAKGWPHCLWVMAAIAVL |
| l | 1 | 1 | | 1 | | SKAVKMIQ*RDLTVWTSHDVN |
| | 1 | | | | | GILTAKGDLWLSDNHLLKYQA |
| 1 | 1 | | | 1 | | LLLEGPMLRLCTCAALNLDTFL |
| | 1 | ŀ | | ì | | PHNEEKIEHNCQQVIAQTYATR |
| | ı | l | | | | GDHLEVPLTDPNPNLYTDGRSF |
| | | 1 | | 1 | | VEKGLQKVGYAVVSDNGILES |
| | | 1 | | 1 | | NPLTPGTSAQLAELIALTWALE |
| | | 1 | | | | LGEGKRVNIYTDSKYAYLVLH |
| | | | | | | AHAVIWREREFLTSEGTPIKHQ |
| 4431 | 34799 | С | 4472 | 11 | 1639 | |
| 4432 | 34800 | A | 4473 | 95 | 2539 | |
| 4433 | 34801 | Α | 4474 | 345 | 768 | PRGARSTRCLPVERR\CDGLQD |
| | | 1 | | I | | CGDGSDEAGCPDLACGRRLGS: |
| | | 1 | | | | YGSFASPDLFGAARGPSDIHCT |
| | | 1 | | | | WLVDTQDSRRVLLQLELRLGY |
| | ı | 1 | | l | | DDYVQVYEGLGERGDRLLQTL |
| | | 1 | | i | | SYRSNHRPVSLEAAQGRLTVA |
| | | 1 | | | | YHARARSHPLMNE |
| 4434 | 34802 | Α | 4475 | 47 | 563 | RLRFAVFTGAFHALSFLLSFVV |
| 1 | | 1 | | 1 | 1 | LCCTYLKGLKVARFHCKRIDV/ |
| | | i i | | 1 | | MHHADARAAGGPAPQCAGTLS |
| 1 | | 1 | | 1 | | \EEQKRRRQRATKKISTFIGTFL |
| | | 1 | | - 0.0 | | VCFAPYVITRLVELFSTVPIGSH |
| 1 | | ı | | | | WGVLSKCLAYSKAASDPFVYS |
| 1 | 1 | 1 | 1 | 1 | | LLRHQYRKSCKEILNRLLHRRS |
| | l | 1 | | 1 | | HSSGLTGDSHSQNILPVSE |
| | | 1 | | | L | |

| SEQ ID NO: | SEQ ID NO: of peptide sequence | | SEQ ID NO: in USSN 09/540,217 | Nucleotide location of first codon for peptide sequence | Nucleotide location of last eodon for last amino acid of peptide sequence | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
|---------------|--------------------------------------|---|-------------------------------------|--|---|---|
| 4435 | 34803 | A | 4476 | 1 | 332 | ERGRQEMSAKLRPPAEPPCVPA RISP*RPS*RQ*MERRCPPWRCS PMPC/CFFREHALQVRCGPTSA DCGRDPLFSPHPKPLPHPVPDIG WVATAGAQRSSSPVPSSLFVW |
| 4436 | 34804 | А | 4477 | 297 | 943 | TGSWGGGADQLRPALTTALM PPDNRFGENTPAAPANGHCAP EPDITLVQDHSELPIGAAATMA HEIGHSLGLSHDPDGCCVEAAA HEIGHSLGLSHDPDGCCVEAPA ESGGCVMAAATWA GAATWA GAGPEY FSYSCSRRQLRAFFRKGGGACLS NAPD/TRTFGAAALCGNGFVEA GEECYCVSYGGECRDLCCFAHN CSLRPGAQCAHGDCCVRCLVR/ CMEGSGSHQLPRLVPGGDSAEI LM |
| 4437 | 34805 | A | 4478 | 1 | 836 | MGPLTERDVKIEFSLEEWQCLD TAPGNLYRDVMLENYRNLVFL VMCSHFAQDVWPEHSIKDSFQ KVILRTYGKYGHENLQLRKDH KSYDACKYVKGGYNGLNQCLT TIDSKIFQCDKYVKVFHKFPNV NRNKIRHTGKKPFKCKNRGKSF CMLSQLTQHKKIHTREYSYKCE ECGKAFNWSSTLTKHKIHTGE KPYKCEECGKAFNRS STLTKHKRIHTEEKPYKCEECG KAFNQFSILNKHKRIHTMGR |
| 4438 | 34806 | A | 4479 | 1 | 588 | MLGKVQQQEOTIAKDLVYTKY KMCGGT/DIANRVLRSLVEASS SIGQQDYILKEGDLVKIDLGVH VDGFIANVTHTFVVDVAQGTQ VTGRKGDVIKAAQLCVEAALC LVKPONQNIQVREAWSKVALS FNCMPIEGMLSHQLKQHVIDGE KNIIQNPTDQKKDHEKAEFEV HEVYAADVLVSSGEGKAKDAG |
| 4439 | 34807 | Α | 4480 | 85 | 561 | LSHCLPLQTTEVGGFGNLLGY WIACSIGCVLSTGMLSHQLKQH VIDGEKTIIQNFTDQKKDHEK AEFEVHEVYAVDVLVSSGEGK VRRVPELAKRGD*ECSPDQMLL KLLFQAKDAGQRTTIYKRDPSK QYGLKMKTSRAFFSEVERRFD AMPFTLRY |

501

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 4440 | 34808 | A | 4481 | li | 1408 | GTSAPOPARSOLLALACLPAPL |
| | | | | | | LARAFARPLLEDRGDSDHSLW |
| | | | | | | LGRETEAAAAQGKRGCSGGSR |
| | | 1 | | | 1 | KMSGEDEQQEQTIVD/DSLVVT |
| | | 1 | | | | KYKMGGDIANRVLRSLVEASSS |
| | | | | | | GVSVLSLCEKGDAMIMEETGKI |
| | | l | | | | FKKEKEMKKGIAFPTSIS\VNNC |
| | | 1 | | | | VCHFSP/L*KSDQDYILKEGDLV |
| | - | | | | | KIDLGVH\VDGFIANVAHTFVV |
| | | | | | | DVAQGTQVTGRK\ADVIKAAH |
| | | | | | | L\CAEAA\LRLVKPGNQNTQVT\ |
| | | 1 | | | | EAWNKVAHSF\NCTPI\EGMLSH |
| | | 1 | | | | SLKQHVIDGEKP*FQNPTDKQK |
| | | | | | | RAHEKADFEVH\DVYAVEGLV |
| 1 | | | | İ | | KPQERARPKDAGQRTTIYKRDP |
| | | ŀ | | | | SKQYGLKMKTSRAFFSEVERRF |
| | | l l | | | | DAMPFTLRAFEDEKKARMGV\ |
| | | | | i | | VECAKHEL/VWQPFNVLYSGRE |
| 1 | | i i | | i | 1 | GDFVCPVLNFTVL\LMPNGPML |
| ŀ | | | | | | ITSGPFEPDLYKSQMEVQ\DAEL |
| | | | 1 | | | KALLQSSASRKTQKKKKKKAS |
| | | | | | | KTAENATSGETLEENEAGD |
| 4441 | 34809 | Α | 4482 | 3 | 190 | |
| 4442 | 34810 | В | 4483 | 1 | 588 | |
| 4443 | 34811 | Α | 4484 | 1 | 1312 | MSSKGSVVLAYSGGLDTSCILV |
| | 1 | l | | İ | | WLKEQGYDVIAYLANIGQKED |
| | 1 | 1 | | | | FEEARKKALKLGAKKVFIEDVS |
| | | l | | | | REFVEEFIWPAIQSSALYEDRYL |
| 1 | | l | | | | LGTFF\ARPCIARKQVEI\AQREG |
| ŀ | | l | | | | AKYVSHGATGKGNDQVRFELS |
| l | | l | İ | | | CYSLAP\QIKVIAPWRMPEFYNR |
| | | l | | 1 | | FKGRNDLMEYAK\QHGIPIPVTP |
| | | l | | | | KNPWSMDENLMHISYEAGILE |
| | 1 | l | | 1 | | NPKNQAPPGLYTKTQDPAKAP |
| | 1 | | | | | NTPDILEIEF\KKGVPVEGGPTF |
| i | | l | | | | KDG\TTHQTFL\ELF\MYLNEVA |
| | | l | | | | GKHGVGPYLTSWENRFHWELK |
| ŀ | | l | | | | SRGILRRPQAG\TILYHAHLDIE |
| 1 | | l | | | | AFTMGGDRAQIPNQGLGFEFVE |
| | İ | l | | | | LGVYRFSGTAPECELVGPCLRQ |
| | | l | | | | SPQERVEGKSAGVPSLKGPRCT |
| 1 | | l | | 1 | | SLGPEVPHCSLYNE\ELVKHGT |
| 1 | | | l | | | CQGDYE\PN*LPPGFIQTSISLKA |
| | 2.012 | _ | 1.105 | | 100 | EGNYHRLPRAKVTAQIRPRVQ |
| 4444 | 34812 | В | 4485 | 47 | 482 | |

| SEQ ID NO: | SEQ ID NO: of peptide sequence | Met hod | SEQ ID NO: in USSN 09/540,217 | Nucleotide location of first codon for peptide sequence | Nucleotide location of last codon for last amino acid of peptide sequence | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
|---------------|--------------------------------------|------------|-------------------------------------|--|---|---|
| 4445 | 34813 | A | 4486 | 2328 | 3435 | KTTTLEDNLGNTIQDIGPGKDF MMKIPFANATKIKIDEWDLIKL KSFCTAKATIKRVNKHDESLR KSFCTAKATIKRVNKHDESLR KSFCTAKATITKRVNKHDENTK RSRGCGFVTYATVEEVDAATN ARPHKVDGKVVEPKRTVSRED SQRPGAHLTVKKIFVGGIKEDT GGFAVTTEDDHDSVDKIVIPKY HTVNGHNCEVRKALSKQEMAS ASSQRGRSGRGGGGONENFC CGGNFSGHGGGGSHDGGYGGGF GSGDGYNGFGNDGGYTGGGF GSGDGYNGFGNDGGYTGGGP YGGSRGYGGGQCGNQDSG YGRSGSYDSCNKGGRGGFGSG SGSNFGGGSVNDFGNYNNGY SNFGPMKGGIF/GGRRSGP*GD |
| 4446 | 34814 | A | 4487 | 1 | 762 | GGQYFAKPPNHSGYGGSSSSSS |
| 4447 | 34815 | A | 4488 | 3 | 333 | |
| 4448 | 34816 | A | 4489 | | 1676 | MRDPNTKRSRGFGFVTVATVE EVDAAMNTTPIKVDGRVVEPK RAVSEDSORGAHLTVKKIEV GGIKEDTEFHHLRDYFEQYGKI UEUHIMTDROSGKKRGFAFVTF DDHDSVDKIVIQKYHTVKGHN CEVRKALPKQEMASASSQRG RRGSGNFGGGGGDGFGGNDMF GRGGNFSGRGGFGSCGGGGY RRGSGNFYGGGSCGGGGYFAKPQ GRSGDGYNGFGNDSNF*GGGSDGYFAKPQ NQAARCVAARWLFRTEARLVF LQKIPPWAVVEVVTVIVAAPA ATATTRDGGCSRNCHIPEV PELLGCPNRRGPFGGVREKQQ TNSKSTRQEITKTIAELKEIETR KTLQKINESRSWFYEKINKVDR LLDRLIKKKREKSQIDAIKNDIG DIVTDPAEIDTTIKEYYKRLYAN ELENLEEMDKFLATYSLHSLNQ EEVESLNKPVTSSEVEAVTNSL PTKKSPGPDGFTVLLEVLAPAIR QEKEIKHIPIGREVKLSLFADI QEKEIKHIPIGREVKLSLFADI QEKEIKHIPIGREVKLSLFADI QEKEIKHIPIGREVKLSLFADI QEKEIKHIPIGREVKLSLFADI QEKEIKHIPIGREVKLSLFADI |

| SEOID | SEO ID NO: | Met | SEO ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|-------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| 1 | sequence | 1 | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | 1 | | sequence | | |
| 4449 | 34817 | A | 4490 | 1 | 1445 | MKCLKFINHKEILEASERKOAE |
| 4449 | 34817 | ^ | 4490 | ľ | 1443 | SLDFPFKKLRWHLCEGWIEEER |
| | | l | | | | DESRKSETIFKDLFKVPVLKETI |
| | | | | | | YYKFYGPPVYOIETVYFMALSP |
| | | | | | | PKSKQFDKTKQNNNNKKTHQF |
| | | | | | | VIVFFKTDEHLSARGRRRRSIVK |
| | | | | | | |
| | | | | | | VSLLPAVIGLKSKFLKKPDQLR |
| | | 1 | | | | KLF\iGGLSFETTDESLRSHFEQ |
| İ | | | | l | | WGTLTDCVVMRDPNTKRSRGF |
| | | 1 | | | | GFVTYAT\VEEVDAAMNARPH |
| | | | | | | KVD\GRVV\EPKRAVSREDSQRP |
| 1 | | | | | | GAHI/TLVKKIFVGGIKEDTEEH |
| | | | | | | HLRDDYFEEIILNSMEKIEVIEI |
| | | | | | | MT\DRGSGKKRGFAF\VTFDDH |
| | | l | | | | DSVDKIVI\QKYHT/VGNGHNCE |
| i | | l | | | | V\RKALSKQEDG*VLHPAQRG\ |
| | | l | | | | RSGSGKLLVVGRGRWFSVGMD |
| l | | | | | | NFG\RGGNFSWSVVAFGGT\RG\ |
| | | | | | | GGGYGWQWGMAYNGFGNDG\ |
| | | i | | | | SNFGGGG\SYNDFG\NYNNQ\SS |
| 1 | | | | | | NFGPMKGGNFG\GRSSGPYG\G |
| 1 | | | | | | GGQYF\AKPR\NQGGYGGSSSS\ |
| 4450 | 34818 | Α | 4491 | 134 | 612 | TVLNSMSVILAISTLLKIITGELL |
| | | | | | | QSFGDGLLWNLVIGIRGIDGLSP |
| | | ! | | | | KVRKVLQLLRLRQIFN/GTFVK |
| | | İ | | | | LIKVTVNMLRTVEPYIAWGYPN |
| | | ı | | i | | LKSVNELIYKHGYGKISKKRIA |
| | | | | 1 | | LTDNVLIARSLGKYGIICMEDLI |
| | | 1 | | | | YEIYTVGKRFKEANNFLWPFKL |
| 4451 | 34819 | Α | 4492 | 1 | 1983 | |
| 4452 | 34820 | Α | 4493 | 1 | 1527 | |
| 4453 | 34821 | В | 4494 | 1 | 2211 | |
| 4454 | 34822 | Α | 4495 | 1 | 2478 | |
| 4455 | 34823 | Α | 4496 | 2 | 1544 | |
| 4456 | 34824 | В | 4497 | 1 | 2151 | |
| 4457 | 34825 | Α | 4498 | 1 | 744 | |
| 4458 | 34826 | В | 4499 | 1 | 2172 | |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | 1 | |
| 4459 | 34827 | A | 4500 | 11 | 2535 | MKSGHPEKEODNSDVQETREIT |
| 1135 | 54027 | 1 | 4500 | ľ | 2555 | IRGLLCTALMRHSTGAIAYLGV |
| | | | | | [| LSGSASLKLAGVPLRCCEGDKD |
| 1 | | | | | | AGHPLETQTALCERGRGARSLV |
| 1 | | | | | l | GNTIMTSOPVPNETIIVLPSNVIN |
| | l | | | | l | FSQAEKPEPTNQGQDSLKKHLH |
| | 1 | | | | Į. | AEIKVIGVNLIQNVLERGWGKC |
| | 1 | | | | | OEMIYVLGLDICRPFFVSRVSEE |
| | | | | | | GRMGORGEEDANSLDFPPASLL |
| i | | | | | ŀ | CLICOEOGVNGESCSPVGMYH |
| | 1 | | | ŀ | | REIVPVYEVLSVITGLOIOVFSG |
| | 1 | | | | | KEADSVIKRSIGWGPFFKPRTK |
| 1 | | | | | | |
| 1 | | | | | | DKNHMISIDAEKAFDKIQQHF |
| | | | | l | | MLKTLSKLGIDGTYLKIIRAIYD |
| | | | | İ | | KPTANIILNGQKLEAFPLKTGTR |
| 1 | 1 | | | | | QGCPLSPLLFNIVLEVLARAIRQ |
| l . | | | | | | EKEIKGIQLGKEEVKLSLFADD |
| l | | | | | | MIVYLENPIVSDQNLLKLISNFS |
| 1 | 1 | | | | | KVSGYKINVQKSQAFLYTNNR |
| 1 | 1 | | | | | QTESQIMSELPFTIASKRIKYLGI |
| | | | | | | QLTRDVKDLFKENYKPLLNEIK |
| | l | | | i | | EDTNKWKNIPCSWVGRINIVK |
| | l | ļ. | | l | | MAILPKVIYRFNAIPIKLPMTFF |
| l | ĺ | | | | | TELEKTTLKFIWYQKRARITKSI |
| ł | | i i | | | | LSQRNKAGDITLPDFKLYYKAT |
| 1 | ļ | | | | | VNKTAWYWHQNRHIDQWNRT |
| Ì | | | | | 1 | KPSEITLHIYNYLFFDNPDKNKK |
| İ | l | l | Į. | | | WGKDSLFNKWCWENWLAICR |
| | | l | | | | KLKLDPFLTPYTKINSRWIKDL |
| | 1 | l | 1 | 1 | | NIRPKTIKTLEENLGITIQDIGMG |
| | | l | | | | KYFMTKTPKAMATKAKIDKW |
| | | _ | | | | DLIKLKSFCTGKETTIRVNRQPT |
| 4460 | 34828 | В | 4501 | 1 | 1785 | |
| 4461 | 34829 | Α | 4502 | 1 | 1415 | |
| 4462 | 34830 | В | 4503 | 1 | 3262 | |
| 4463 | 34831 | Α | 4504 | 1 | 278 | |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nuclcotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 4464 | 34832 | IA | 4505 | 3 | 2528 | ENKDTTYONLWDAFKA\VCRG |
| 14404 | 34032 | / ` | 1305 | ľ | 2020 | KFIALNAHKRKQEKSKIDTLTS |
| | | | | | | QLKELEKQEQTHSKASRRQEIT |
| 1 | | | | | | KIRAELKEIDTQKTLQKINESRS |
| | | | | | | WFFERINKIDRPLARLIKKKREK |
| | | | | | | NOTOTIKNCKGDITTOPTEIQTT |
| 1 | | | | | | IREYYKHLYANKLENLEEMDK |
| | | ļ | | | | FLNTYTLPRLNQEEVESLNRPIT |
| | | l | | l | | GAEIVAIISSLPT/K/KSPGPDGFT |
| | | | | | | AEFYORYKEE/LEKEGILPNSFY |
| | | | | | | EASIILIPKPGRDATKKENFRPIS |
| | | 1 | | | | |
| | | l | | | | LMNIDAKILNKILAKRIQQHIKK LIHHDQVGFIPGMQGWFNIRKS |
| | | | | | | INVIQHINRTKDKNHMIISIDAE |
| | | l | | | | |
| | | | | | | KAFDKIQQRFLLKTLNKLGIDG TYFKIIRAIYDKPTANIILNGQKL |
| | | l | | | ŀ | EAFPLKTGTRQGCPLSPLLFNIV |
| l. | | 1 | | | | LEVLARAIROEKEIKGIOLGKEE |
| | | 1 | | | | VKLSLFADDMIVYLENPIVSAQ |
| | | l | | | | NLLKLISNFSKVSGYKINVOKS |
| | | l | | | ŀ | QAFLYTNNTQTESQIMSELPFTI |
| | | | | | | ASKRIKYLGIQLTRDVKDLFKE |
| | | | | | , | NYKPLLKEIKDDTNKWKNIPCS |
| | | | | | | WVGRINIVKMAILPKLPMTFFT |
| | | | | | | ELEK\TTLKFIWNQKRACIAKSI |
| | | | | | ľ | LSQKNKAGGITLPDFKLYYKAT |
| | | | | | | VTKTAWYWYQNRDIDQWNRT |
| | | 1 | | | | EPSEIMPPIYNYLIFDKPEKNKQ |
| | | | | | | WGKDSLFNKWCWENWLAICR |
| | | | | | | KLKLDPFLTPYTKINSRWIKDL |
| | | | | | | NVRPKTIKTLEENLGITIQDIGL |
| | | | | | 1 | GKDFMSKTPKAMATKAKIDK |
| 4465 | 34833 | В | 4506 | ı | 5401 | GRDT MISK IT KANNA TRAKIDK |
| 4466 | 34834 | A | 4507 | 1 | 5271 | MNIDAKILNKILPNOIOOHIKKL |
| 14400 | 34034 | ľ` | 1307 | ľ | J271 . | IHHDOVGFIPGMOGWFNIRKSI |
| | | | | | | NVIOHINRAKDKNHMIILIDAEK |
| | | | | | | SFDKIQQPFMLKTLNKLGIDGT |
| | | | | | | YFKIIRAIYDKPTANIILNGOKLE |
| 1 | | | | | | VFTLKTGTRQGCPLSPLLFNIVL |
| | | | | | | EVLARAIRQEKEIKGIQLGKEEV |
| | | | | | | KLSLFADDMIVYLENPIVSAQN |
| 1 | | 1 | l | | | LLKQISNFSKISGYKINVQKSQA |
| | | | | | | FLYTNNROTESOIMSEIPFTIAL |
| | | | | | | KRIKYLGIQLTRDVKDLFKENY |
| 4467 | 34835 | В | 4508 | 924 | 3423 | KIR I LOIQLIND VEDLEKENT |
| 4468 | 34836 | A | 4509 | 525 | 673 | RDSWGTCPVSGAGKVDWPPSS |
| 14400 | 34030 | l^ | 4307 | 323 | 073 | *HHR*HQQWCCGMPHQLSTKE |
| 1 | | 1 | 1 | I | 1 | NISIKDHLTKEKRKGGAV*RII |
| | L | L | L | l | l | INISINDITE I KEKKKUUA V-KII |

| SEO ID | SEO ID NO: | Met | SEO ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | 1 | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 4469 | 34837 | A | 4510 | 25 | 1766 | GTCQFAAMNVVFAVKQYISKM |
| | | | | | | IEDSGPGMKVLLMDKETTGIVS |
| | | | | | | MVYTQSEILQKEVYLFERIDSQ |
| | | 1 | ł | | | NREIMKHLKAICFLRPTKENVD |
| | | | | 1 | ĺ | YIIOELRRPKYTIYFIYFSNVI\SK |
| | | - | İ | l . | | SDVEVIGLKLIEGEVVAEVQEF |
| | | | | | 1 | YGDYIAVNPHLFSI.NILGCCQG |
| | | | İ | 1 | | RNWDPAQLSRTTQGLTALLLSL |
| | | | | 1 | | KKCPMIRYOLSSEAAKRLAECV |
| | | | | | | KOVITKEYELFEFRRTEVPPLLL |
| | | | | 1 | i | ILDRLDDAITPLLNQWTYQAM |
| | | 1 | | | | VHELLGINNNRIDLSRVPGISKD |
| | | | 1 | | | LREVVLSAENDEFYANNMYLN |
| | | | 1 | | | FAEIGSNIKNLMEDFQKKKPKE |
| | | | | l . | i e | QQKLESIGS\MKA\FVENYPQFK |
| 1 | ŀ | 1 | | l . | | KMSGTVSKHVTVVGELSRLVS |
| | | 1 | 1 | ı | | ERNLLEVSEVEQELACONDHSS |
| 1 | | i | 1 | | | ALQNIKRLLQNPKVTEFDAARL |
| ĺ | | | | I | | VMLYALHYERHSSNSLPGLM |
| | | 1 | | | | MDLRNKGVSEKYRKLVSAVVE |
| | | | ł | l | | YGGKRVRGSDLFSPKDAVAITK |
| | | 1 | | i | | QFLKGLKGVGNV\YTQLQPF\L |
| i | | | | | ľ | H\ETLDHLIKGRLKENLYPYLGP |
| | | | | 1 | İ | STLRDRPQDIIVFVIGGATYEEA |
| | | | | 1 | | LTVYNLNRTTPGVRIVLGGTTV |
| | | | | ı | ŀ | HNTKSFLEEVLASGLHSRSKES |
| 4470 | 34838 | Α | 451I | 1 | 1335 | MAPVTMMGYRSGKMGILADV |
| | | | | 1 | | QLQVGPPGPWLHLVVIAPVPEC |
| | | | | | i | ITGIGIFSSWGSPDVGPLLYDIR |
| | | | | i . | 1 | AIMWGSLAPAENTWILGNNHR |
| | | | | I | | RFLAQLKPRVIMQDFSNVISKS |
| | | 1 | | | | DVKSLAEADEQEVVAEVQQVI |
| | | | | 1 | | TKEYELFEFRRTEVPPLLLILDR |
| | | 1 | | 1 | | CDDAITPLLNQWTYQAMVHEL |
| | | | l | 1 | | LGINNNRIDLSRVPGISKDLREV |
| | | 1 | 1 | 1 | | \VSSAEIDEFYANNMYLNFAEIG |
| | | | 1 | 1 | | SNIKNLMEDFQKKKPKEQQKL |
| | | 1 | | 1 | | ESIADMKAFVENYPQFKKMSG\ |
| | | | | 1 | | TVSK\HVTVVG\ELSRL\VSERN |
| | | 1 | | | | LAGRFSEVEARNWAC\QNDHS\ |
| | | 1 | | | | SALQNIKRLLQNPKVTEFDAAR |
| | | | | | | LVML\YA\LHYERHSSNSLP\GL\ |
| | | 1 | | | | MMDLRN\KGVFWRKYSKARVL |
| | 1 | 1 | | 1 | | AVVEYGGKRVRGSDLFSPKDA |
| | | | 1 | 1 | | VAITKQFLKGLKQQEIVNCVLA |
| | | | | 1 | | AANVYIKQLPLSIQPSASLNGCI |
| | 1 | | | | | SLEKKPLVSTQRN |
| 4471 | 34839 | Α | 4512 | 1 | 816 | |
| 4472 | 34840 | Α | 4513 | 26 | 257 | |
| 4473 | 34841 | Α | 4514 | 56 | 236 | |

| SEO ID | ICEO ID NO. | Mat | SEQ ID NO: | Nucleotide | Nucleatide location of last | Amino acid sequence (X-Unknown, |
|----------------------|-------------------------|-----|------------------------------|--|--|---|
| NO: | of peptide sequence | bod | in USSN 09/540,217 | location of first codon for peptide sequence | codon for last amino acid of peptide sequence | *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
| 4474 | 34842 | Λ | 4515 | 170 | 373 | HSPRGSTASF/CEVSETKNPPIPD TPATREAEGLRSRLAVYSTRDS PCVACSGSYTQAQGSLGRKFQ DP |
| 4475 | 34843 | A. | 4516 | 262 | 358 | |
| 4476 | 34844 | A | 4517 | 2298 | 2556 | NHKNPRRKPRQYHSGHRHGQG LHD*NTKSNGTKSNGNKSQN* Q\WDLINLKSFCTAKETTIRVNR QPTEWEKIFTIYPSDKGLISRI |
| 4477 | 34845 | A | 4518 | 801 | 944 | DQEPTNSRHILATQMGPSPITKQ SNPGV**KECGFSCSPRVWRYL VS |
| 4478 | 34846 | В | 4519 | 85 | 660 | - |
| 4479 | 34847 | A | 4520 | 693 | 827 | |
| 4480 | 34848 | A | 4521 | 272 | 339 | |
| 4481 | 34849 | С | 4522 | 532 | 2754 | |
| 4482 | 34850 | В | 4523 | 1 | 519 | |
| 4483 | 34851 | В | 4524 | 266 | 935 | |
| 4484 | 34852 | Α | 4525 | 1 | 1584 | |
| 4485 4486 4487 | 34853 34854 34855 | A | 4526 4527 4527 4528 | 1 328 | 723 335 871 | GALPNGDRGRRKSRFALYKRP KANGVKPSTVHVISTPQASKAI SCKGQHISISTI-SRANTVVVEY THOKDTDMFQVGRSTESPIDEV VTDTISGSQNTDEAQ!TQSTIBR FACRIVCDRNEPYTARIFAAGF DSSKNIFLGEKAAKWKNPDGH MOGLTTINGVLVMHPRGGFTEE SQPGVWREISVCGDVYTLRETR SAQQRGKLGLQTGDMAENT/T VHALPSNCMVWRRSQTRQQIS DCGGGRARTAIFAGAARAADN KKCAGARRALGRARGCSATAR PRRRRRPRGLAPPRPARPPG GMSYKPNLAAHMPAAALNAA GSVHSPSTSMATSSQVRQLLSD VGPPSLGVTGOTGNSQVPGSKY AELLAIIEELGKEIRPTYAGSKS MERLIKRGIHHARGLVRECLAE TERNARS |
| 4488 | 34856 | A | 4529 | | 653 | MAGPAESSPQGAHPNSPFALQH HSSLTVKPLHRQNVIQHQVAG GPNRGHQAGSSTSPQPLEALK RPNLRAPFHSQSRRILIPPAGNP TFGAAAPADPSTQRRDRWGCA LPMPRVAAGSAHHQQAGFAA AQHRTPVALFSPPLSLVYGQQ RKESEIPTVYFPPARARGWTET GVEHVPAYNKTRAPEKCDUSV PSPHSSPDAETSHPRHISPCPG |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|----------|------------|-------------------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | ŀ | sequence | | |
| 4489 | 34857 | Α | 4530 | 3 | 432 | NSRVDDFVAAQDAKGKKVAP |
| | | 1 | | | | APAVVKKQEAKKVVNPLFEKR |
| | l . | 1 | | | I | PKNFGIGQ\QRLLARAEKKAAG |
| | | | | | | KGDVPTKRPPVLRAGVNTVTT |
| | | | | | | LVENKKAQLVVIAHDVDPIELV |
| | | 1 | | | | VFLPALCRKMGVPYCIIKGKAR |
| | | | l | | | LGRLVHRKTCTTVAFT |
| 4490 | 34858 | Α | 4531 | 1 | 2073 | MKPCAHSWNAELSRNIIRHSFN |
| | | | | İ | | LVMVAASQVAVSQLLGSYEILI |
| | | | l | | | LVSIELMFCFGLGYFFIPMQEW |
| | | | | | | PNTYGERVFVDVESSVFKWNH |
| | | | | | | KCLHKTEAERDYTKKRLKLCG |
| | | | | | | HKPGNAVGQQKLEEARNRFFT |
| | 1 | | | | | RAPGGSAALPTLRFQPSDTDFR |
| | į . | | | | | LLASRTILTFETKNPSELAERLR |
| | | | | | | SVCGNQSNAYARLLEYRLNAL |
| | | | | | | RGLWNAQRQLALEEQHERESS |
| | | | | | | GDEETLALLKRQGLLQQPEQAF |
| | | | | | | FTSRMGLLLVFPLIQSQSRTDPS |
| | 1 | | | | | LCNITAEVLLNCLRDCQPLSLT |
| | | | | | | KEPADCLNGIETLLCSWLEETS |
| | | | | | | DTGRHIPHKQKENAAAALVAL |
| | | | | | | ACARGFVYCRNEELEPGWVAF |
| | | 1 | | | | GSGSLLHRPVSFDNKPHSLFQVI |
| | | 1 | l | | | DQNTLQVCQVVPMPANHLPIG |
| | 1 | | | | i | STMSTVHLSSDGTYFYWIWSPA |
| | | | ŀ | | | SLNEKTPKGHSVFMDIFELVTL |
| | | | | | | KGKKAKGKKVAPAPAVVKKQ |
| | | | | | | EAKKVVNSLFEKR\DIQPKRELT |
| | | | | | ŀ | YFVKW/PRYVRLQQQRAILYKQ |
| | | | | | | LKVPPAINQFTQALNCQTVTQL |
| | | 1 | | | | LKLAHKYRPETKQEKKQRLLA |
| | İ | | | | | QAEKKAAGKGGVPTKRPPALR |
| | | | l | | | AGVNTITTLVENKKAQLVVIAH |
| | | | | | 1 | DVDSIELVVFLPALCCKMGVPY |
| | | 1 | | | | CIIKGKARLGRLVHRKTCTTVA |
| | | | | | 1 | FTQVNLEDKGALAKLVEGIRTN |
| | | | | 1 | | DNDRYDEICCHWGGNILGPKS |
| | | <u> </u> | | | | VACIAKLEKAKAKELATKLG |
| 4491 | 34859 | A | 4532 | 1 | 2565 | |
| 4492 | 34860 | A | 4533 | 1 | 644 | MPKGKKAKEKKVAPAPAVVK |
| | 1 | I | | 1 | | KQEAKKVVNPLFEKRPKNFGT |
| 1 | | | | 1 | | GQDIQPKRDLTHFVKWPCYIRL |
| | | | | | | QQQRTILYKWLKVPPEINQFTQ |
| 1 | 1 | 1 | | 1 | | APDSQTATLLLKLAH/KYRPET |
| | 1 | 1 | | 1 | | NQEKKQRLLARAKKKAAGKG |
| 1 | 1 | 1 | | 1 | | DIP\TKSPPVLRAGVNTITTLVE |
| | | | | | | NKKAQLVVIAHDVDPIKLVVFL |
| | | 1 | | 1 | | PVLCHK/MGVPYCIIKGKARLG |
| | L | | | | | HLVHRKTCTTVTFTQVNSEDK |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Aurino acid sequence (X-Unknown, |
|--------------|------------|-----|--------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | eodon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 4493 | 34861 | Α | 4534 | l l | 931 | KSIQKGLKMCLSSSLLPPSKMP |
| | | | | | | KGKKAKGKKVAPAPAVVKKQ |
| | | l | | | | EAKKVVNPLFEKRP\KNFGIGQ |
| | | | | | ł | DIQP\KRDFTRFVKWPRLLSGC |
| | | | | | | MR\KRAILYKAG*KLPPA\INQF |
| | | | | | | HPGPWDPANKLLQLL*AWAHK |
| 1 | | | | ľ | | \YRP\ETKAKRKKQRL\LARA\E |
| | | | | | | KKAA\GKGDVPNERDPPV\LRA\ |
| | | | | | | GVNTVTHLWWRNKKAPAWVV |
| | | | | | | IATRRWIPFEL\VVFLPAL\CREK |
| | | | | | | WGSPYCIIKGKARLGR\LVH\RR |
| | | | | | | PCT\TVGFHTR*NSKDKRRLLA* |
| | | | | | | AGLEAIRTQFTIDQIRWRSGRH\ |
| | | | | 1 | | WG\GNVLG\PK\$VARIRQASKR |
| | | | | | | QRLKELATKLG |
| 4494 | 34862 | Α | 4535 | 3 | 227 | |
| 4495 | 34863 | Α | 4536 | I | 338 | |
| 4496 4497 | 34864 | A | 4537 4538 | 2 | 352 368 | |
| 4497 | 34866 | A | 4539 | 3 | 468 | |
| 4498 | 34867 | A | 4540 | 2 | 790 | PRGRNRRRKTFQERRMTLNESP |
| 4499 | 34607 | l^ | 4340 | - | 790 | EKIGKWIECYGHPPASKLVEIYI |
| | | | | | | HTVFVEDKLSICIRSFNKKADGS |
| | | | | | | WRMTVDYCKLNQVVTAIAAAI |
| | | | | | | PDVVSLLEQINTSPDTWYAAID |
| | | | | | | LANALFSIPVHKGYINSLALCH |
| | | | | | | NVIWRELDCFSLPRDTTLVHYI |
| | | | | | | DDIMLIGSSVOEVENKLDLLVK |
| | | ŀ | | | | DKLLHLAPPTTKEEVQHMVGL |
| | | ľ | | | | FGFWRQHIPHLGVLHQPIYRVI |
| | | | | | | RKAA/SFEWGPEQEKALQQVQ |
| | | | | | | AAVGGKQSENNLGHQRSPGLW |
| 4500 | 34868 | В | 4541 | 179 | 1219 | |
| 4501 | 34869 | Α | 4542 | 1706 | 2517 | THLLVPGMQPLTWQMPFSPFLS |
| | | | i | | | ISPTRSNLPSAATPVIAQWA/HE |
| | | | | | | QSGHGGRDGGYTWAQQHGLA |
| | | l | İ | | | FTNTDLATVNAKIGFAYPVCDA |
| | | | | | | SAKTTIRGLLECLIRCDGIPHSIA |
| | | | | | | SDQARIHRSRNQEVEVEVAPLT |
| | | | | | | ITPSDPLAKFLLSVPVTLRSAGL |
| | | | | | | EVLVPGEGMLPPGNTRTIPLNW |
| | | | | | | KLRLPPGHFGLLLTLSQEAKNG |
| i | | | | | | VTVLAGVIDLDYQDEISLLLHN |
| | l | | l | | | GGKKEYARNTGDPLGRLLVLP |
| | 1 | | | | | CPVIKINGKLQQPNPGGTTNGS |
| L | | | l | | | DPSGMKV |

| SEO ID | ISEO ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|-------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | | in USSN | location of first | codon for last amino acid | |
| | sequence | | 09/540,217 | eodon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 4502 | 34870 | Α | 4543 | 3 | 367 | DLWPFTRVTVH/WGKANDQTF |
| | | 1 | | | | OGLLDTGSELTLIPGYPKRHCC |
| | | 1 | | | | PPVKVRVYGGQTDGSWRMTV |
| | | 1 | | 1 | | GYHKLNOVVTPIAAAVPDVVS |
| | | | | | | LLEQINTTPAIKWVVHSSIPSSN |
| | | | | | | GSGVYVIRLEQVLKAQ |
| 4503 | 34871 | Α | 4544 | 2 | 541 | |
| 4504 | 34872 | В | 4545 | I | 681 | |
| 4505 | 34873 | A | 4546 | 2 | 1091 | PRGRNRRRKTFQERRMTLNESP |
| | | 1 | | | | EKIGKWIECYGHPPASKLVEIYI |
| | | | | ľ | | HTVFVEDKLSICIRSFNKKADGS |
| | | | | | | WRMTVDYCKLNQVVTAIAAAI |
| | ł | | | | | PDVVSLLEQINTSPDTWYAAID |
| | | | | | | LANALFSIPVHKGYINSLALCH |
| | | | | | | NVIWRELDCFSLPRDTTLVHYI |
| | | | | | | DDIMLIGSIKFLGVQWCGACRD |
| | ŀ | l | | | | IPSKDPADPMVLEVSVADRDAV |
| 1 | | | | | | WSIWQALIDESQQRPLGFWSKS |
| 1 | | | | | | LPSSADNYSPFERQLLAYYWAL |
| | | | | | | VETERSTMGHQVTMLPELPVM |
| | | | | | | NWVLSDPSSHK/ANGLAGWSG |
| | | 1 | | | | TGKKHDWKIGDKEIWRRGMW |
| | | ı | | | | MDLSEWSK/D/VKIFVSHVSAH |
| | | | | | | QRVTSAEEEFNNQVDRMTRSM |
| | | | | | | DTTQPLYPTTPVIAQWAHE |
| 4506 | 34874 | Α | 4547 | I | 1236 | |
| 4507 | 34875 | Α | 4548 | I | 1467 | GEKGNDQTFRKLLDTGSELMLI |
| | | l | | | l | PLRVVIPTTSLFNSPIWPVQKTD |
| | | l | | | | GSGRMRVDYHKLNQVMTPTA |
| | | | | i | | AAVPDVVSLFEPINTFLGTWYA |
| | | | 1 | | | AIDLANALFSIPVCKAHQKQFA |
| | ŀ | 1 | | | | FSWQGQQYTFTVLPQRYINCLA |
| | | | | İ | | LCHNLIQRDLDHFLLPQGITLV |
| | ŀ | | | | | HYIDSGPFIK*PEAASFEWGPEQ |
| | Ì | | | | | EKALQQVQAAVQAALSIGPYD |
| | | | | | | PADPMVLEVSVADGDAVWSL |
| | | | | | | WQAPKGESQWRPLGFWSKALP |
| | | | | | | SSTDNYSSSDVQLYTDSWAVA |
| 1 | 1 | 1 | | | | SSLAG*SGTWKKHDWKIGDKEI |
| | | | | I | | WGRGMWMDLSEWSKTGKIFV |
| 1 | 1 | | l | | | SHVNAHQLVTSAEEDFNNQVD |
| 1 | 1 | 1 | l | 1 | | RMTRSVDTTQPLSPATPVVAQ |
| | 1 | | l | | | WAHEQSGHGGRNEGYAWTQQ |
| | | | l | | | HGLPLTKADLTTATAECPICQQ |
| | 1 | 1 | | I | | QRPTLRPRYGTTSQGDQPATC |
| 1 | | 1 | | 1 | | WQVDYIEPLPSWKRQRFLLTGI |
| | | 1 | l | | 1 | NTHSGYGFAYPPCNASAKTTIH |
| | 1 | 1 | 1 | I | | GLIACLIHCHGIPHSIASLYRER |
| L | | L | | | | GTHFTDKEVQQWAHAH |
| | | | | | | |

| SEQ ID NO: | SEQ ID NO: of peptide sequence | | SEQ ID NO: in USSN 09/540,217 | Nucleotide location of first codon for peptide sequence | | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
|---------------|--------------------------------------|---|-------------------------------------|--|------|---|
| 4508 | 34876 | A | 4549 | 2 | 1602 | INLSPILPQDLWPFTRVTVHWGK GNDQTFQGLQDTGSELMLIPGD PREHCSPPVKVGSYGGQVINGV LQQVELTVGTVGPRTHPVVISP VPECIDIDILNSWQNPHIDSLT RVKAIMVGKAK WKPFEPLIPIK IVNQKQYRIPGGIAEISATIKDL KDAGVVIPITLPFNSPFWPVKKT IVNQKQYRIPGGIAEISATIKDL KDAGVVIPITLPFNSPFWPVKKT JASWRMKVYCKLNQVVTPII AAVPDV/VYSLLEQINTSPGTW AAJDLANAISIPVIKKAHQKQ FAFSWQGHQNTFTVFTILLHIH KVGHAQQHSIIKWKWYHIDGA KAGSGGTSKI.NEEVPQMPMVT TSAALPSLPRPAPMASWGVLY DQLTEEEKTRAWFTDGSARY GTTQKWTAAALQPLSRTSLKG SGEGSSQWAELQAVHLVVHF SGEGKSSQWAELQAVHLVVHF SGEGKSSQWAELQAVHLVVHF SGEGKSSQWAELQAVHLVVHF SGEGKSSQWAELQAVHLVVHF SGEGKSSQWAELQAVHLVVHF SGEGKSSQWAELQAVHLVVHF GUNDENGENESWGKWENDKWGKGKM GRGMWMDLSEWFKPVKIFG |
| | | | | | | SHVSAHQWVISAEEDFNNQVD KMTCSVDITQPLSPATPVITQW AHKQSGHGGRDGGYTWAQQH GLPLTKTGLAMATAECPI |

512

| SEO ID | ISEO ID NO | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X-Unknown, |
|--------|------------|-----|------------|-------------------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \-possible nucleotide insertion) |
| 4509 | 34877 | IA | 4550 | lı . | 1891 | MLSSTQNAGGSYQRVRGALDT |
| 4309 | 34677 | l^ | 1330 | l' | 1071 | QEWKWGEVSPRTLNVDGRAL |
| 1 | | 1 | | I | | VSVANTHGTDRPAYTLNPQSR |
| 1 | | | | ŀ | | DORSGVITLGYKRPLEREDLFE |
| 1 | | 1 | | 1 | | LKESDSFCTACPIFEKQWRKEV |
| 1 | | 1 | 1 | 1 | | LRNQERQKVKALNKLDEALCP |
| | | | | 1 | | GIII.TQSTDSNANLFQKQPHRH |
| | | | | 1 | | QTSGRWQIIIFCEHSSDFGWNG |
| 1 | | | | 1 | | YGYAVALLVVVFLQTLILQQY |
| 1 | | | | 1 | | ORFNMLTSAKVKTAVNGLIYK |
| | | | | l | 1 | KLGWSGKVSWLILHDVGHGIM |
| | | | | i | i | EGYIAWGKGSDVRITWEKKST |
| | | | | 1 | l | EMRTRPAQKMALLLSNVSRQK |
| | | | | 1 | l | FSTGEIINLMSATHGLDSKPOSP |
| | 1 | | | ı | | LVCPFSNPNGRISPLARAGLAD |
| | | | | ı | i | HYRVTHLQILKLYAWEPSYKN |
| | | | | 1 | | KIIKIRDQELEFQKSARYLTVFS |
| | | | | 1 | | MLTLTCIPFLTKISLGRLEDFLN |
| | | | | 1 | | TEELLPQSIETNYTGDHAIGFTD |
| | | | | 1 | 1 | ASFSWDKTGMPVLKESIRIRIEC |
| | | | | | | VLNQLSLFETVDYPGSVAYVSQ |
| | | | | 1 | | QAWIQNCILQENILFGSIMKKEF |
| 1 | | | | 1 | | YEQVLEACALLPDLEQLPKGD |
| | | | | i | ľ | QTEIGERAVNISGGQQHRVSLA |
| 1 | | | | i | | RAVYSGADVYLLDDPLSAIDV |
| 1 | | | | 1 | | HVGKQLFEKVIGSLGLLKNRTH |
| 1 | | | | 1 | | ILVTHNLTLLPQMNLIVVMKSG |
| | | | | l | | RIAQMGIYQELLCKTKNLTN\F1 |
| | | 1 | | | | KSSVNKKKVGEWEESGRGS |
| 4510 | 34878 | Α | 4551 | 2 | 542 | LTSAKVKTAVNGLIYKKVSLAT |
| 1 | | | | 1 | | LCVYFLLDERIILTAPKVFTSMS |
| | | | | 1 | | LFNILRIPLFELPSVISAVVQTKI |
| 1 | 1 | ı | | 1 | | SLGRLEDFLNTEELLPQSIETNY |
| | | 1 | | | | TGDHAIGFTDASFSWDKTGMP |
| 1 | | | | 1 | | VL/NRGSEAYVSQQAWIQNCIL |
| | | | | 1 | | QENILFGSIMKKEFYEQVLEAC |
| 4511 | 34879 | +- | 4552 | ļ. —— | 667 | ALLPDLEQLPKGDQTEIGERVR |
| 4511 | 348/9 | A | 4552 | 1' | 067 | IETNYTGDHAIGFTDASFSWDK |
| | | 1 | | İ | | TGMPVLKESSVAYVSQQAWIQ NCILQENILFGSIMKKEFYEQVL |
| | I | | | l | | |
| | İ | 1 | | İ | | EACALLPDLEQLPKGDQTEIGE R/GKETAVNISGGQQHRVSLAR |
| | I | | | | | |
| | | | 1 | 1 | | AVYSGADVYLLDDPLSAIDVH |
| | | 1 | 1 | | | VGKQLFEKVIGSLGLLKNRTSH SVCHYTLLAVPHLLEVQILTGN |
| | | 1 | 1 | 1 | 1 | FIQSLGFNYHEYANNSNAYIVN |
| | 1 | 1 | 1 | 1 | | LDLFPGFQTCVYKLLSPIRCLIC |
| 4512 | 34880 | A | 4553 | 201 | 336 | QQTPGKAVHAPFIADQSLT*EL |
| 4312 | 34000 | I^ | 4333 | 201 | 330 | VSVFPQFQLFPYRR*DSHSGKS |
| 4513 | 34881 | A | 4554 | 3 | 515 | 75 TT QT QLITTER DSH30K3 |
| 7313 | 154001 | 10 | 17334 | <u> </u> | 12.12 | L |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|------------|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \-possible nucleotide insertion) |
| | | 1 | | sequence | | |
| 4514 | 34882 | A | 4555 | 1 | 852 | MPCTTSGLDKVPTSKKALTRY |
| 4314 | 34002 | n | 4333 | ľ | 832 | GYGSLTLDFSGSIIPCKMCLSPS |
| l | | ł | | | | TRIVRPSQPRGTEDPDETGDTEF |
| | | i i | | | | VNSDESFLLEGTASPSPVVAVSP |
| 1 | | | | | | PRPMLPSAFPPLSEDINPVLPEA |
| | | ŀ | | | ' | TVLASPEVVAKQTHVDSPRKPL |
| 0 | | 1 | | | | STFLFASRPVTKLKSRQTPGGE |
| | | 1 | | | | VDSVTCEEKTDGPWRKTVDYC |
| | 1 | 1 | | | | KLNOVVTPIAALVPDMVSLLV |
| | | | | | | OINTSSDTSYAAIDLAKAFFSIP |
| | | 1 | | | | VYKAHQKQFIFSWQAQQYTFT |
| | | 1 | | | | VLPQGYIISPALCHNLIRR/DLD |
| | | 1 | | | , | HFLLPQDITLVHYIDDIRL |
| 4515 | 34883 | В | 4556 | 288 | 327 | III EEI QUITEVII TIDDIKE |
| 4516 | 34884 | A | 4557 | 51 | 598 | LFGGCHTSGGLAVRVPRMPRG |
| 1310 | 34004 | ľ | 1337 | j'' | 370 | SRSRTSRMAPS\ASRAPLK*ELE |
| | | 1 | | | | PROAOVAOPPA\AAPPSAVGSS\ |
| | | ı | | | | AAAPRQPG/LFMAQMATTAAG |
| | | 1 | | | | VA\VGFCCGGHTLGHGI\TGGLS |
| | | 1 | | | | VGGKLIA*ALRRP*HOFNOGSF |
| | i | | | İ | | RGTQAKHSKQQPALPLLWRIKT |
| l | 1 | 1 | | | | SFREVVPPEPRVTIQGFCGGFPM |
| | | 1 | | | | RLLETVPDL |
| 4517 | 34885 | A | 4558 | I | 10434 | MTVIRSGIAYILHLKSYDVNIQT |
| 4317 | 54665 | <u> </u> ^ | 4336 | l' | 10454 | GSNACNQPTHPNGDCSHFCFPV |
| | | | | | · · | PNFQRVCGCPYGMRLASNHLT |
| | | | | | | CEGDPTNEPPTEOCGLFSFPCK |
| | | | | | | NGRCVPNYYLCDGVDDCHDNS |
| | | | | | | DEQLCGTLNNTCSSSAFTCGHG |
| | | | l | | | ECIPAHWRCDKRNDCVDGSDE |
| l | | | İ | | | HNCPTHAPASCLDTQYTCDNH |
| | | 1 | | | | OCISKNWVCDTDNDCGDGSDE |
| | | | | | | KNCILNCTASQFKCASGDKCIG |
| 1 | | 1 | | | | VTNRCDGVFDCSDNSDEAGCP |
| 1 | | | | | | TRPPGMCHSDEFQCQEDG |
| 4518 | 34886 | A | 4559 | 24 | 849 | ATGRCCCGLAPGFPLCWVLYP |
| 1310 | 31000 | 1 | ,,,,, | ľ. | 0., | GGRGSA\CPEPHVLRTGSPLQRE |
| | | | | | | ORTNGRTDLSSLLPNLNFDSPP |
| | | | | | | RCKHKNOLAITLRKRIRKLATS |
| | | | ŀ | | | LFSSTIFRISGTSVIISAPGAGLPL |
| | | | | | | PALFPTRCQPKFSRSIDPTGKAV |
| | | | | | | OTADIRLSARATLWLGGSIEESP |
| | | | | | | VLCSTLRLLLRRLPPPLTWTSPN |
| | | | | | | RPTOPCTAQTOTNQSVGIAAPS |
| | | | 1 | | | AIRVIYPESVVLNAVIYLPGDPE |
| | | 1 | | | | VSGLPRAFKRRFSVEVRLDCGT |
| | | | 1 | | | FKLLLVYCTHPGDKKVNTCKT |
| | | | 1 | | | GALVAF |
| 4519 | 34887 | c | 4560 | 192 | 449 | UALTAI |
| 4520 | 34888 | A | 4561 | 192 | 786 | |
| 4521 | 34889 | A | 4562 | 3 | 14073 | |
| 4321 | 134009 | 1.7 | 4302 | J | 114073 | |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | | | Amino acid sequence (X-Unknown, |
|--------|------------|-----|------------|-------------------------------|---------------------|--|
| NO: | of peptide | hod | in USSN | location of first | | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \-possible nucleotide insertion) |
| | | | | sequence | | |
| 4522 | 34890 | В | 4563 | 58 | 1282 | |
| 4523 | 34891 | В | 4564 | 1 | 684 | |
| 4524 | 34892 | Α | 4565 | 1 | 1356 | MGRKYTLKWEFEEGFTEKKEL |
| | | | | | | KKVTSEGYITPVEIYDYRQYCY |
| | | | | | | ALQRPIATTQIDDVRDGHTTRL |
| | | | | | | AKLEKQEQTHSKASRRQEIIKIR |
| | | | | | | AEPKEIETQKTLQKINESRSWFF |
| | | | | | ŀ | EKINKIDRLLARLIKKKREKNQI |
| | | | | | | DAIKNDKGDITTNPTEIQTTIRE |
| | | l | | | | YYKHLYANKLENLEEMDKFLH |
| | | 1 | | | | TYILPRLNQEEVESLNRPITGSEI |
| | | | | | • | EAIINSLPTKKSPGPDGFTADFY |
| | | 1 | | | | Q\MLEVLARAIMQEKEIKGIQL |
| | | | | | | GKEEVKLSLFADYMIVYLENAI |
| 1 | | 1 | l | | | ISAONLLKLI/SNFSKVSGYKINV |
| | | | | | | OKSOAFLYINNROTESOIMSER |
| | | | | | | PFTIASKRIKYLGIQLTRDVKNL |
| | | | | | | FKENYKPLLNEIKEDTNKWKKI |
| | | l | | | | PCSWVGRINIVKMAILPKVIYRF |
| | | ľ | | | | NAIPIKLPMTFFTELEKTTLKFI |
| į. | | | | | | WNQKRACITKSILSQKNKAGGI |
| | | | | | | MLPEFKLY/YQGSSTQTAWYW |
| 4525 | 34893 | Α | 4566 | 1 | 1102 | MANCDINRKDEKGGKEKKDRS |
| 1020 | | ļ., | | ľ | | KSKSLMDTLKRQLSAKQKPKG |
| | | | | | | KAGKPSGSSADEDTFSSSSAPIV |
| | | 1 | | | | FKAVRAQRPIR/STSLRSHHCSP |
| | | | | | | MPWPLRPTNSEETCIKME\PSPP |
| 1 | | 1 | | | | LNGVRKDFHDLOSETACOEOA |
| | | 1 | | 1 | | NSLKSSASQNGDLYLRLDEHVP |
| l | 1 | | | | | VVIGLLPQDYIQYTVPLDEGMC |
| | | | İ | | | PLEGSSSYCLDSSSTMEVSVVPS |
| | | | | ì | | OVGGRSFPEDESQADQNLVVA |
| | | 1 | | | | PEIFVDQSMNGLLTGTTGVMLQ |
| | ŀ | | | 1 | | SPRVGPHHVPPLSPLLPPMQNN |
| | | | | ĺ | | OIORNFSGLTGTEAHMAESMLO |
| | | | | 1 | 1 | HLNFDFNSAPGVARVYVSVQSS |
| | | | | | | GPMVVTSLTEELKR\LAKQGWL |
| | | 1 | | | | WPPLKSVRRCVLARRSLYTKQL |
| | | | | ĺ | | NOEEGTELNLGSSCLLC |
| 4526 | 34894 | A | 4567 | 364 | 661 | PFHFTCFSCKVYFADPGSAARS |
| 4320 | 34074 | ^ | 17307 | 304 | 001 | VPGSPSAVCAQCILCTGHCAVC |
| | | | | | | PGLGEHHSSGRTLMKTKLHSK |
| | | | | | | KLKPCYLLC*SKN*KTQGGSPK |
| 1 | 1 | 1 | | | | S*NVNKYLVTLI |
| 4527 | 34895 | | 4568 | 53 | 470 | CISHILPGPSAKTLSPVLSLSSPY |
| 4527 | 24893 | A | 4308 | 33 | 470 | TASFOPTFVRTFSHOTTYLSLGS |
| 1 | | 1 | | | 1 | |
| 1 | | 1 | | | l | VPVAQLKCSAGQQRGELLCRR |
| 1 | 1 | 1 | | 1 | | GVWGSWISVSHFTEIATLPAAC |
| 1 | | | | | | LEDGE\DFNLGGILDSSKYL*SIQ |
| L | | | | L | | KTNTHRIVDGKVVSETNITDVL |

| SEQ ID NO: | SEQ ID NO: of peptide sequence | | SEQ ID NO: in USSN 09/540,217 | Nucleotide location of first codon for peptide sequence | Nucleotide location of last codon for last amino acid of peptide sequence | Amino acid sequence (X=Unknown, *-Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
|---------------|--------------------------------------|---|-------------------------------------|--|---|---|
| 4528 | 34896 | A | 4569 | | 1635 | MGWTCKILELVAAATGAHFLV QUVQSGAEVKKPGASVKVSCK ASGYFFTYCYLHWREPYSPICG RCILLTLLLGDCLWGEGAWTQ GDVLQPSDRASFLAMGVNTTC QQVGDLSGDFPNSVGKACKCR EFHTLTPLAHTSSTTHETFPGMS HIALELSQGSSLQCLEAQTOG QRGELTVSANEQPESRGHGCVL LCETQSEGKSVRAQAQTSLKGS QKRLGGARTLCTGLSPGGRKQ ERSKIDTLTSQLKELERQEOTYS LQKINESRSWFFEKIYKIDRPLA RLIKKREKNQIDAIKNGKDI TDTPTEIQTTRAYYKHLYANK LENLEGMDKFLDAYTLPRLNQ EEVESLNRPITGPEIEAIN/STPT KKSPGPDRFTAEFYQRSDVLA RAIRGKEIKCIQLGKEEVKLSL PFSKVSGYKISVQKSQAFLYTN NRQTESQIMSELPFTIASKRIKY LGIQLTKDVKDLFKDNCKPHLN |
| 1500 | 24007 | _ | 4.570 | | 120 | EIKEDTNKWKNIPCS |
| 4529 | 34897 | A | 4570 | 1 | 429 897 | MDLNYTLEÖMDLTDIYRTFHPT TTEYTFYSTGHGTFSKTDDVIG KMSLDKFKKIEMISNTVSDHS GIKLENSERNLENHANTWKLN NLLLNECWVKNKMKMEIKLL- ELNDNNDTYTHNLWDRAKVVI RGKCIALNTYIKKSERAQTDNL RIKNKNHMISIDAEKAFDVIN PMIKTLSKISIGOTVLNLIKDIY DKPTANIMLNGEKLKAFTLRTG TRIMMQGEPLPSLLFNI/VLEVL ARAIRQEKEIKGIQIGKEEVKYS LEADVVILVPENPTDSSRKLLEL IKEFSSFWIQD |
| 4531 | 34899 | A | 4572 | 1 | 1461 | |
| 4532 | 34900 34901 | A | 4573 4574 | 45 | 365 534 | VCHLEPGERCGPSRGCRAVGV QTEKMQTAGALFISPALIRCCT RGLIRPVASSFLNSPVINSSKQPS YSNFPLQWARREFQTSVVSRDI DTAAKFIG\AGSATVGVADSGA GIGAVFGSLIIVYARKLSLKQQL LEYAILGFALSEGMIGLFCLMV AFLILFAM |

| SEQ ID | | | SEQ ID NO: | | | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------------------|---------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 4534 | 34902 | Α | 4575 | 98 | 624 | DWYSRSHPKELWEGSKKKSIN |
| | | | | | | HSACSLQAHGGPISTSLNPHSKP |
| | l | | | | | RGRVSPPPGKRQQECRARPGRS |
| | | | | | | PELAGPPPANVQETSQKNACAS |
| | | | | | | RLSEPPGEGP\EPAAHPQPHRGS |
| | | | | | | SSGPCSRGGYRQPLFPGPAASG |
| l | | | | | | VPASGSV/RSRIPGAPQGVALAR |
| | | | | | | RGPQGSPSPAPRFFPATERQS |
| 4535 | 34903 | В | 4576 | l | 604 | |
| 4536 | 34904 | Α | 4577 | 3 | 331 | LAPAPSAAWRTGLKALTPSST |
| | | 1 | | | | WMLCASE\HHVGSGCVGDHLA |
| | 1 | | | | | GCRQEKTLPCQR\YCVFCRRRR |
| | | | | | | ARSLQAQCGFSLTPALELLPVPF |
| | | İ | | | | LKLLCPGPPRRRRICRILPGAGL |
| 4537 | 34905 | Α | 4578 | 1 | 871 | |
| 4538 | 34906 | Α | 4579 | 3 | 510 | GPPSRVDDFVAAAAAAAVAPVV |
| | | | | | | LYACPRHSPIPPWSIRGRRVVVT |
| | l | | | | and the second | GFGPFGEHTVNANWIAVQELE |
| | l | | | | | KLGLGDSVDLHVYEIPVEYQTV |
| | ı | | ĺ | | | QRLIPALWEKHSPQL\VVHVGV |
| | 1 | | | | | SGMATTVTLEKCGHNKGYKGL |
| | i | | | | 1 | DNCRFCPGSQCCVEDGPESIDSI |
| | | | | | | IDMDAVCKRVTTLGQCI |
| 4539 | 34907 | Α | 4580 | I | 285 | MAPGALPALGEEEGPGASGLSA |
| | | | | | | ELGHLSAGSRAFRETSVDSALD |
| | | | | | ŀ | TPFPAGTFVRLEFKLRQTE\SGR |
| | | | | | | RKDWKKPKCKVQPERRKQKCL |
| | | | | | | TCVKLEC |
| 4540 | 34908 | В | 4581 | ł | 228 | |
| 4541 | 34909 | Α | 4582 | 1 | 697 | MGLERPVDRVMWLPGALWNS |
| | | | | | l . | AVVSAPVGEEWALAGTGNQGL |
| | | 1 | | | | QDIQGMHCPEEGISQIHGRDHR |
| | | 1 | | ł | | NAKDSHTGVWCSCTLGIISTIIIR |
| | | l | | | 1 | PKCRFSIDRSDSDYLPTSSCRRD |
| | | 1 | | | | PGGAEPCQDRPRVEQLCSVLAN |
| | | | | | 1 | RSGPLAKCHWYESPVSYTQVC |
| | | 1 | | | | VSDLCQYGTGNRMLCTMLEAY |
| | | l | | | | VQLCALRCALPARVASQPGMQ |
| | | 1 | | | | LRVACPANSYYDSCGPPFPATC |
| l | ŀ | l | | | | ASLNSSAPCTLQCTVSCFCLEGF |
| | 1 | | 1 | | 1 | ALEAG\SSVPHACCGCHLQGRY |
| | 1 | 1 | 1 | I | 1 | I/APGPWPSATGMRAPCPTRRC |
| | 1 | | 1 | l | 1 | VSLTSASMARATACCAPCWRP |
| | | | | | | TSNSAPCAARCLPAWRASLGCS |
| | | | l | | | YVWRVQPTATMTPVGHPSRPP |
| | | _ | | L | | VLASTPPRPAPSSAQ |
| 4542 | 34910 | В | 4583 | 1 | 208 | |
| 4543 | 34911 | Α | 4584 | 2 | 230 | |

| SEQ ID NO: | SEQ ID NO: of peptide | Met | SEQ ID NO: | Nucleotide location of first | Nucleotide location of last codon for last amino acid | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide |
|---------------|--------------------------|------------|------------|---------------------------------|--|---|
| 10. | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \-possible nucleotide insertion) |
| 4544 | 34912 | Α | 4585 | 106 | 669 | GCGCVLLPGGVGAPGHSPEGP |
| | | | | | | VPPRDARQLRTCGLAGTLHLST |
| | | | | | | SCGHPTGAWRGALGSQWNGH |
| | | | | ŀ | 1 | NPVQDHLQEAQPWFLEFDRG* |
| | | | ļ | | | RCFWRMATSFPRYPTWDDY*R |
| 1 | | | | | | LPCCRCLPQCKKPAETTGCLPIS |
| | | | | | | GEKTHGGVGDLLGEAPARLRQ |
| | | | | 1 | | WASQRQPATDLPA*ASRGRPA* |
| | ļ | _ | | | | GKDTHRACVAGEAAQDA |
| 4545 | 34913 | Α | 4586 | 2 | 597 | TPKGGIRLGLAKLGCPTAWINP |
| | | | | | | YGRGMPLAHSVLSSGARVLVV |
| | l | 1 | | | | DPDLRESLEEILPKLQAENIRCF |
| j | l | 1 | | ŀ | | YLSHTSPTPGVGALGAALDAAP |
| | | 1 | ļ | | | SHPVPADLRAGITWRSPALFIYT |
| | | | | | | SGTTGLPKPAILTHERVLQMSK MLALSGATADDVV\YTEVLPLY |
| | ŀ | | | | | HVMGLVVGILGCLDLGTSLAS |
| 1 | i | 1 | | 1 | | YGLRVYFILWSVLGPSRRTLCL |
| 4546 | 34914 | A | 4587 | 9 | 573 | EEEERKKKKKKKKKKEEEEGEEE |
| 4340 | 34914 | ľ | 4367 | ľ | 373 | GGGMGEKKKKEEEEEGEEGE |
| 1 | | 1 | | 1 | | KEREKER\EKERKKKKEERKEK |
| | 1 | 1 | | 1 | | ERERKKKRERKKEKERERKEG |
| | 1 | | | | | EGERERKSTECTSSSYI/IKKLVV |
| | | | | 1 | | KOPOAAPSGEIPEEGIAVLGGDS |
| | | 1 | | | | SMPVIVPEDLPVGQDVEVEDSD |
| | | 1 | | i | | INDPDSLILVSSQAGGGGVITAY |
| | | | | | | CNLEHLGSSDPPT |
| 4547 | 34915 | Α | 4588 | 1 | 297 | |
| 4548 | 34916 | Α | 4589 | 114 | 752 | DGSAAPRATSDSFTYTVCVSEF |
| | | 1 | | | | PVDDFMELGRSIPDTQL/DAVIE |
| | | l | | | | SQKANQCAVLIYT/SGTTGIPKG |
| | | l | | 1 | | VMLSHDNITWIAGAVTKDFK/P |
| | i | | | | | TDKHETVVSYLPLSHI/AAQMM |
| | | l | | | | DIWVPIKIGAL/IYFAQADALKV RLSKDLGSDFILLGSPVGLRPST |
| | | l | | | | KRLPVLSKLGHTYRRVVWVEE |
| | | l | | | | SSGPHTISNONNYRLOGPMMK |
| | | | | | | LKRHFVAQKYKKQIDHMYH |
| 4549 | 34917 | A | 4590 | 1 | 837 | MVTQKLPNAQENLKHAERQAA |
| 4347 | 34717 | <u>۱</u> ^ | 4390 | , | 857 | GCCPGRSHIFQHVGPGASESLR |
| | | | | | | GEGCSTHPEAOGAOERCEOWK |
| | | | | | | KDQHWCLASHTDVTQQWGRH |
| | | | | | | IVQEGGTHRGPSAVLSLRTALD |
| | | | | | 1 | EG/ARGGCSHPITAQLPLQLRHL |
| | 1 | 1 | | | | PRPPPAPAR\PSPAPPAATSPPT\P |
| | 1 | 1 | 1 | | | PPAPAR\SSPAPPAATSPPTASSG |
| | | | | | | ACAALPOLPLOLRHLPRPPPAP |
| | | | | | | AR\SSPAPPAAMSPP\RPPAPARP |
| | | | | | | RLRRSTACATALRPGERGSAAA |
| | 1 | 1 | 1 | | 1 | OPGARSETSFCRLG/AAAAVLD |
| 1 | 1 | | 1 | | [| PAFISSQALACPVVGVI |
| L | | | L | L | | PAFISSQALACPVVGVI |

| SEQ ID NO: | SEQ ID NO: of peptide sequence | Met hod | SEQ ID NO: in USSN 09/540,217 | Nucleotide location of first codon for peptide sequence | Nucleotide location of last codon for last amino acid of peptide sequence | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
|---------------|--------------------------------------|------------|-------------------------------------|--|---|---|
| 4550 | 34918 | A | 4591 | 3 | 377 . | |
| 4551 | 34919 | В | 4592 | 1 | 1632 | |
| 4552 | 34920 | Λ | 4593 | I | 1224 | MDGTNRFYLYVWETERQQDV |
| | 1 | | | ŀ | | EHVARCILCYDKCRPDPECPAG |
| ŀ | | | | l | | TPGPQEVDVDLVFVVDSSYGV |
| | | | | | | DADVYRGSLSLADAALEDLEV |
| l | l | | | | | AEQPGASHRGARVALVTHTTP |
| | | | | | | NF\GRGFHLTTYGNRKQMQRH |
| | | | | | | VREASARPLQGTAPPGHALEW |
| l | | | | | | TLENVLLAAPRPRKAQVLFAIV |
| | ŀ | | | | | ASETSSWDREKLWTLSLEAKC |
| | | | | | | KGITLFVLALGPGVGTHELAEL |
| 1 | I | 1 | | | | AELVSAPSEQHLLRLQGVSEPE |
| ļ | l | | | | | VNYAQGFTRAFLNLLKSEQSPG |
| l | | | | | | TGAPWVEWGEGFTEPGIWACR |
| | | | | | | WTNQYPPPELTEECGGLHRGD |
| | | | | | | TVLQLVTPVNRFMYAAKENSL |
| | | ŀ | | | | KRKTKANFHLAVELELDESYFR |
| | | 1 | | | | AYYEGTLYEVSALPLQRSNELL |
| | | | | | | QKWSLFHGSNGRRVSGSHPEV |
| | | | | | | ALQQGGTGLPAVLVWQLWRQ |
| 4553 | 34921 | A | 4594 | 266 | 556 | HKVQQÏCYRLRLVSQILFSINQT |
| | | | | | | LAERQIVTFTVYPDTERDRETR |
| | | | | ľ | | NLADLKQIKIDLGKFSDNPDGY |
| | l | | | | | IDILRGLRQSFDLTW\RDIMLLL |
| | | _ | | | 205 | NQTLAPN |
| 4554 | 34922 | В | 4595 | 11 | 735 | |
| 4555 | 34923 | Α | 4596 | 70 | 624 | PTAMVEEGIAAGGVMDVNTAV OEVLKTALIHDGLARGIREAAK |
| | | | | | | ALDKYVYQSQYCGFLQPDQKL |
| | | | | | | ATOGKKGMGVHGVKRKSS*M |
| | | | | | | ASVLPGNLRKRRQAH\LCVLAS |
| | | | | | | NCDEPMYVKLVEALCAEHQIN |
| | | | | | | LIKVDDNKKLGEWVGL\CKIDR |
| | | | | | | EGKPRKVVGCSCVVVKDYGKE |
| | | | | | | SQAKDVIEEYFKCKK |
| 4556 | 34924 | A | 4597 | 145 | 682 | SWRNRTVSNGSAVSASSVHLCF |
| 1330 | 31,721 | ľ. | 1.557 | 1 | 002 | AECKALCGERILTDGSDVSRPTI |
| | | | | İ | | AAGGVTDVNTALQEV\LKTALI |
| | | | | | | HDGLAR\GISRTWPKAL\DKRO |
| | | | | | | AH\LCVLASNC\DEPMYV\KL\V |
| | | | | | | EALCAEHQINLI\KV\DDNQET* |
| 1 | | | | | | EKWV\GLCKI\DREG\KPRE*WL |
| | ļ | | | | | VGS*CSSLRTIGKESQAKDVIEE |
| | | | | | | YFKCKK |
| 4557 | 34925 | A | 4598 | 252 | 590 | RSLDLVWWQLSGGLAGSAKPK |
| | | | | | | PCTPVKQSTVMSFPSHKEQYFL |
| 1 | | 1 | | | | MDGKKK/YDKESEKYYSILEKH |
| | | | | | | LNLSAKKKESHLQENSSGPSVS |
| | 1 | 1 | 1 | | | TKLINLFSKRLLCAFLPAQLTPY |
| 1 | 1 | 1 | | | | SFCS |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|---------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | |
| | sequence | 1 | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=pussible nucleotide insertion) |
| | | | | sequence | | |
| 4558 | 34926 | Λ | 4599 | ı | 1662 | |
| 4559 | 34927 | Α | 4600 | 4430 | 4904 | LIKGTRCLGRRPSFAYSRSNI*A |
| | | 1 | | | | *S*P/EGTSAQLAELLALTLALE |
| | | 1 | | | | LGNGKRINVYTDSKYAYLILHE |
| | | 1 | | Ì | | HAAIWKERAFLTSGGTPIKYHK |
| 1 | | 1 | | | | EIMELLHTVQKPKEVAVLHCQS |
| 1 | ŀ | 1 | | | ŀ | HQKESSPLEDTTTAGPLLHPYP |
| | • | 1 | | | 1 | AGSSPERSSPSSQQLLGDLFRGI |
| 4560 | 34928 | Α | 4601 | 1 | 2630 | MEQANHPVRLINVVCKDTLKK |
| | ŀ | 1 | | | | VQQETSCPLTHVHYAEAITGRC |
| | | ı | | | | TAPEDKGSLDQKPPTDDPTGCP |
| | | 1 | | | | WOVPAHVITLTETWYCLTIEGO |
| | | 1 | | | | EIDFLLDTGVQKPNGQWRLVQ |
| | | ı | | | | DLIPIKEAVIPLYPVVPNPYTLIS |
| | I | ı | | | i | OIPEKAEWFMALDLKDAFFCIS |
| 1 | | 1 | | | | LHSDSQFLFAFEDPTNHTSKITR |
| | | 1 | | ļ. | | TVLPQGFRDSPPLFGQALAQDL |
| | | 1 | | | | GHFSSPGTLVFQYVDDLILATSS |
| | 1 | ı | | | į. | EASCQQATLDLLNFLANQGKV |
| | 1 | 1 | | | į. | VPNLWGKLPLNTTRKSWSYCT |
| | | ı | | | | QCKNPRRWQSYTAKAIKKQLA |
| | 1 | 1 | | | | EAGPVTAILLLLIFGPCIFNLLIK |
| | 1 | 1 | | | | FVSSRIEAIMLQMVLQMEPQMS |
| | 1 | 1 | | | | STNNFYQGPLDRCTDPLSGLES |
| | | 1 | | | | SPRCSEAPCLMSQWTGDIEYDL |
| | | ı | | | | LLPPIPHQTTLCDLQNLKGIFSR |
| | 1 | i i | | | | YHRKWYGEILALLTPTANVCG |
| | | 1 | | | | HSOVPHACSIYHDPVTWNPQG |
| | 1 | ı | | | | LLPKSLYGVTKWGDKEHFEWG |
| | 1 | 1 | | | | SQQQRAFYELK\KKLMSAPALG |
| | 1 | i | | | | LPDLTKLFTLHVSDREKKMAV |
| | 1 | ! | | | | RVLTOTMGPWLGPVAYLSKQL |
| | 1 | ı | | | | DGVSKSWPPCLRALAATALLA |
| | 1 | 1 | | | | REVDKLTLGQNLNIKAPHAVV |
| | I | 1 | | | | TLMNTKGHHWLMNARITRYQS |
| | 1 | 1 | | | | LLCDKPHITIEVCNTLNPTTLLL |
| | 1 | 1 | | | | VSESPVEHNCVEVLDSVYSSRP |
| 1 | 1 | 1 | | | | NLRDHPWTSVDWELYVDGSSF |
| | 1 | 1 | | | | INPQGESVWGIIQGKRPIKLWG |
| | 1 | 1 | | | | KRRKVSARDLAIIGGSVEAPKL |
| 4561 | 34929 | A | 4602 | 1 | 506 | FLALTSRFLFVLLNEETRSHLEK |
| 1301 | 137727 | ۱^ | .502 | I. | | SLCWKVSPHIKMDLLOWIOSK |
| | 1 | 1 | | | | AQSDGSTLQQGSLEFFSCLYEIQ |
| | 1 | 1 | 1 | | | EEEFIQQALSHFQVIVVSNIASK |
| | | 1 | | | | MEHMV\SSFCLKRCRSAOVLHL |
| | 1 | 1 | | | | YGATYSADGEDRARCSAGAHT |
| | | l | | | | LLVQLPERTVLLDAYSEHLAAA |
| | | 1 | | | 1 | LCTNPNLIELSLYR |
| 4562 | 34930 | A | 4603 | 3 | 381 | LCTIM NEIELSETK |
| 4563 | 34931 | A | 4604 | 3 | 483 | |
| 4564 | 34931 | A | 4605 | 3 | 410 | |
| 4304 | 34932 | 1^4 | 4003 | 2 | 1410 | |

| SEQ ID | SEQ ID NO: | | SEQ ID NO: | Nucleotide location of first | Nucleotide location of last codon for last amino acid | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide |
|--------|------------|----|------------|---------------------------------|--|---|
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 4565 | 34933 | Α | 4606 | 2 | 249 | SADAPMFDMGVNHEKYDNSL |
| | | | | | | NII/SVMKAGPVEKRPAWHPMD |
| | | | | | | TLP*LAPRSLFLCSNASCTTNCL |
| | | | | | | EPLAKVIHDNFGIVEGLMV |
| 4566 | 34934 | Α | 4607 | 2 | 481 | LAPLVKEIHDNFGMGEGLMTT |
| | | - | | | | GHAITATHKTADGPSGKLWRD |
| | | | | | ł | GRGAHQNIIPASTGAAKAVGK |
| | | | | ŀ | ŀ | VMPELNGKLTGVAFRVPTANV |
| | İ | | | | | SVVDLTCRRQKPAKYDDIGKV |
| | | | | | ŀ | VRQAPEGPLKGILGYTEHQVVS SDFNSDTHSSTFDAGAGIALND |
| | 1 | | | | | HEATLSPPPH |
| 4567 | 34935 | В | 4608 | 79 | 278 | HEATLSFFFH |
| 4568 | 34936 | A | 4609 | 2 | 1201 | PSTACRNSARACSTVSRIFFCVA |
| 4500 | 34730 | l^ | 4007 | ľ | 1201 | SRATSLRTPMGKVKVGVNGFG |
| | | | | ŀ | | RIGRLVTRAAFNSGKVDIVAIN |
| | | | | | | DPFIDLNYMVYMFQYDSTHGK |
| | ì | | | | | FHGTVKAENGKLVINGNPITIFO |
| | | | | | ľ | ER\YPSKINWG\DAGAEYVLEST |
| | | | | 1 | | GAFTTMENAGAHLQGGAKRVI |
| | | | | | | ISAPSA\D\APMFVMGVNHEKY |
| | | | | | | DNSLKIISNA\SCTTNCL\APL\A |
| | | | | į. | | KVIHDNFG\IV\EGLMTTVH\AIT |
| | | | | | | ATQKTV\DGPSGK\LWALMGPR |
| | | | | ł | | GFFQEHQSLPFTGGC/ARVVGQ |
| | i | | | | | GSSPELERGKLTWAWAFRCPQ |
| | | | | 1 | | LPKRVNGWDL\TCRL\EKPCPK |
| | | | | I | | YD*HQGRVVKAGRRKGPLQGA |
| | İ | | | | 1 | ILGLQLSNPGGSPSGLSTSDNPL |
| | | | | 1 | 1 | LPPFDAWGLAFALQRTHFCSKL |
| | | | | | | IFLGIDNGILGYSNQGGWDLHG |
| | | ١ | | | | PPWPTWAFQGS |
| 4569 | 34937 | Α | 4610 | 61 | 226 | WRIMPTKKVMITMGRTTQRRM |
| | 8 | | | | | LES/SQQFWPCHLH*KLVPSCLQ LGCLVFHFRRER |
| 4570 | 34938 | A | 4611 | 153 | 495 | OHAAECKAHAGLPGLPLPARK |
| 4570 | 34936 | ľ | 4011 | 1133 | 773 | LASRHGAPRWRQSGVGPGGKV |
| 1 | | | | | | ENYGRRRL\PGTRHPOSLSHKP |
| | | | | | | AKKIDVARVTFDLYKLNPODFI |
| | | | | 1 | | GCLNMKATFYDTYSLSYDLHC |
| | l | | | | | CGAKRIMK |
| 4571 | 34939 | Α | 4612 | I | 643 | |
| 4572 | 34940 | Α | 4613 | 286 | 698 | ESDNNLTQGTSI*QGTRHPQSLF |
| | | 1 | | | 1 | PLSPAKKI*CGPVLTFLTCYKLN |
| | 1 | | | | | PQGLSLGCLNIEGRFFMDYVIPF |
| 1 | 1 | | | | | PIDLALLLGAKRIMKG\TLHWA |
| | 1 | | | | | LFSMQTTGPRA/VFTSCYLQQL |
| | 1 | | | l | | LDATEDGHPPKGKASSLIPTCL |
| | | _ | | | | KILQ |
| 4573 | 34941 | A | 4614 | 59 | 294 | |
| 4574 | 34942 | A | 4615 |]1 | 2253 | L |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nuclcotide | Nucleotide location of last | Amino acid sequence (X-Unknown, |
|--------|------------------------|-----|-----------------------|--|--|---|
| NO: | of peptide sequence | hod | in USSN 09/540,217 | location of first codon for peptide sequence | codon for last amino acid of peptide sequence | *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
| 4575 | 34943 | A | 4616 | 12 | 197 | LARSGMGFYRRGLLGEVKGRV |
| 1373 | 31713 | ľ | 1010 | | l''' | EGNRMWHVIVRTSPNHRYTFT |
| | ļ | | | | | LKTHPSVVPGSIAFSLPQ\RPWS |
| 4576 | 34944 | Α | 4617 | 302 | 441 | |
| 4577 | 34945 | A | 4618 | 944 | 1257 | RLPFSPRSVGPTPOAPRLLCNG |
| | | 1 | | l | | WROLPTTFFTELEKTTLKFIWN |
| | | 1 | | | | QKRALIAKTI/LKPKNKAGGITL |
| | | 1 | | İ | | PDFKLYYKATVTKTARFLLYK |
| | 1 | | | | | VSQIDNTDLFDPVKIKFE |
| 4578 | 34946 | А | 4619 | 1 | 1370 | MNIDAKILNKILANRIQQHIKKL |
| | | | ļ | | | IHHDQVGFIPGMQGWFNIRKSM |
| | İ | | | | | NVIQHINRTKDKNHMIISIDAEK |
| | İ | | | | | AFDKIQQPFMLNTLNKLGIDGM |
| | | l | | | | YLKIIRAIYDKPTANIILNGQKL |
| | | | | l | | EAFPSKHGTRQGCPLSPLLFNIV |
| | | 1 | | | | LEVLARAIRQEKEIKGIQLGKEE |
| | | l | l | | | VKLSLFADDMIIYLENPIVSAQN |
| | | | | | | LLKLIGNFSKVSEYKINVQKSQ |
| | | | | | | AFLYTNNRQTESQIMSELPFTIA |
| | ŀ | | l | | | SIRIKYLGI*\LTRGVKDLFRENY |
| | | | | | | KPLLNKIKEDTNKWKNIPCSWV |
| | | | | l | | GRN\NIMKMAIL\PKVIYRFNAIP |
| | | | | | ' | IKLPMTFFTELEK\TTLKFIWNQ |
| | | İ | | | | KRARIAKSILRQKNKAGGITLP |
| | | | l | | | DFKLYYKATVTKGAWFQHHK |
| | | | | | | HTLIKEPLLDSVFSPNRPDHGK |
| | 1 | | | | | KQDKQPQTKNIANASADSKNT |
| | | 1 | | | | QQMNGFVTGAATSFIPKDRTAS |
| | | 1 | | | - | SLCGCTGRRRQSVAKYLRIRPHI |
| L | | | | | | NVPSFTYYK |
| 4579 | 34947 | Α | 4620 | 2 | 671 | WHQNLALTRASGSFHS/WEEG |
| | i i | 1 | | İ | | KGGADMSHEICVANLQVYVRS |
| | | | | | | TDFDRTLMSAEANLAGLFPPNE |
| | | | | | | VQHFNPNISWQPIPVHTVPITED |
| | | | Ì | | | RLLKFPLGPCPRYEQLQNETRQ |
| | 1 | 1 | | l | | TPEYQNRSIQNAQFLNMVANET |
| | | 1 | | 1 | | GLTNVTLETIWNVYDTLSCEAP |
| | | | | l | | SPPWGRKPPLERLWPRPRELTC |
| | 1 | | 1 | ĺ | | PLRYT\QTHGLLLPPWASPQTV |
| | | | | l | | QRLSQLKDFSFLFLFGIHEQVQ |
| | | | | L | | KARLQG |

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| SEQ ID NO: | SEQ ID NO: of peptide sequence | | SEQ ID NO: in USSN 09/540,217 | Nucleotide location of first cudon for peptide sequence | Nucleotide location of last codon for last amino acid of peptide sequence | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide deletion, \-possible nucleotide insertion) |
|---------------|--------------------------------------|-----|-------------------------------------|--|---|---|
| 4580 | 34948 | Α | 4621 | 1 | 1923 | DSVAFEDVAVNFTQEEWALLG PCQKNLYEDVMQETIRNLDCG HETEFVEYENLRDPMNMPLHT |
| | | | | | | TDGPHKCKICGKGFDCPSSLKS |
| ŀ | İ | | | | ŀ | HERTHTGEKLYECKQCGKALS |
| | | | | ŀ | | HSSSFRRHMTMHTGDGPHKCK |
| | | | | ļ | | ICGKAFVYPSVFORHEKTHTAE |
| | | | | | | KPYKCKQCGKAYRISSSLRRHE |
| | | l | ŀ | | | TTHTGEKPYKCKCGKAFIDFYS |
| | | 1 | | | | FONHKTTHAGEKPYECKECGK |
| | | ŀ | | | | AFSCFQYLSQHRRTHTGEKPYE |
| | | l | | | | CNTCKKAFSHFGNLKVHERIHS |
| | | | | l | | GEKPYECKECGKAFSWLTCFLR |
| | | 1 | | | İ | HERIHMREKPYECQQCGKAFT |
| | | į | | | | HSRFLQGHERIHTGEKPYECKE |
| | | 1 | | | | CRKAFSWLTCLLQHERIHTREK |
| | | | | | | PYEGKQCGKAFTHSRFLQGHE |
| | | | | | | RTHTAKKLCECLSTVSARKSVD |
| | | | | | ľ | LIIASYPLFLNLFSTPKTLRNCSY |
| | | | | | | RRHERMHTGEKPYECKQCSKA |
| | | | | | | LPDSSSYIRHERTIITGEKPYTCK |
| | | | | ŀ | | QCGKAFSVSSSLRRHETTHSAE |
| | | | İ | | | KPYECKQCGKTFHHLGSFQIHM |
| | | 1 | | | | KRHTGDRPHKCKICGKGFDRPT |
| | | | | | | LVRYHERISTGEKPHECKQCGK |
| | | | | | | AFDHLGSFQRHMIRHTRDGPH |
| | | | | | | KCKICGKGFDCSSTLQSHERTH |
| | 1 | | | | | TGEKKLYECKQCGKALSHSSSF |
| | 1 | ļ., | | | | RRHMTMHTGDGPHK\CKICGK |
| 4581 | 34949 | Α | 4622 | 1 | 256 | MGKGSFKYAWALYKQKAECE |
| | ľ | | | | 1 | RGVTIDTSLWKFETSKCYVTI\K |
| | | | | | | DFIKNIITGTSQQGQTASVAAFC |
| | 24040 | ļ | 1500 | 173 | 212 | ILSSCPASWKNQVSHRLGG |
| 4582 | 34950 | Α | 4623 | 173 | 717 | SINAVASTRRTIEKFEKEAAEM |
| | | | | İ | ł | GKGSFKYAWVLDKLKAERERG ITIDISLWKFETSKYYVTIIDAPG |
| l | | | | | | |
| | | 1 | | | | HRDFIKNMITGTSQADCAVLIV AAG\VGEFEA\SICQNG\QTREH |
| | | | | | | ALLAYT\LGVK\QLICRVNKMD |
| | 1 | ı | | | | |
| | | 1 | | | İ | STEPPYSQKRYEEIVKEVSTYIK KIGYNPDTRAFVP\ISGLNGDH |
| 1 | | | | | | |
| 4602 | 24051 | - | 4624 | 3 | 525 | MLEPKC GCPSGPGHRCVAGHGAPGAVC |
| 4583 | 34951 | Α | 4624 | 2 | 323 | RHVPTAWPGYSRCSPGPGPRGV |
| | | | | 1 | | |
| 1 | 1 | | | | | EAVGHQRHRAPETHSTPAADR |
| | 1 | | 1 | l | | HRRGLPGS\KSDSAMEPSPSPAP |
| - | 1 | | 1 | l | | QAQPPKPVPKPRTVFGGLSGPA |
| | 1 | | | l | | TTQRPGLSPALGGPGVSRSPEPS |
| | | | | | | PRPPPLPTSSSEQSSALNTVEMM |
| | l | | L | L | L | PNSIYFGLDSRGRAQAAQDK |

| SEQ ID | SEQ ID NO: | | | | | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------------------|---------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \-possible nucleotide insertion) |
| | | | | sequence | | |
| 4584 | 34952 | Α | 4625 | 2 | 448 | RRAHACARRRKKEMLGVNVL |
| | | | | 1 | | TSHSSOERMKLTFKKKAVNFA |
| | | ŀ | İ | | | DAAAAOGPLLPAMVNPTMFFH |
| | | ŀ | | ł | | IAVDGEPLGCVSFEVRGLESKK |
| | | | | 1 | | *LLI*SIKLC*QIG\LFADKVPKT |
| | | | | | | AENFHALSTGEKGFGYKGSCFH |
| | | | | | | RIIPGFTCQSGDFTRPTA |
| 4585 | 34953 | A | 4626 | 1 | 751 | GTRDATAEENRVLLAMVNPTV |
| | l | | ' | | | FFDIAVDGEPLGRVSFEVRGLD |
| | | | | i | | TKK*LLI*SIKLC*QIGGSSIFITS |
| l | ľ | | | l | | D*KNSCLPLIVQQCLLFLRILP\L |
| | | | | | | FADKVPKTAGV*FFFKQKIFRA |
| 1 | | | | l | | LSTG\EKGFG\YKGFPAFHRIIPG |
| | | | | l | | FMCQGW*LSHRHNGTGWQVH |
| | | 1 | | | | LMGRNFEDE\NFILKAYGVLGS |
| | | | | | | LSMAKCLDPTKIGSPVFPSCTA |
| | | 1 | | | | KT\EWL\DGQALWCFGK\VKKG |
| | ŀ | l | | 1 | | LNIVEAMERF\GSRNGKTS\KKI |
| | | | | l | | TIADCGQLE |
| 4586 | 34954 | Α | 4627 | 3 | 615 | PECIIGIDILSSGQNPHIGSLTGR |
| | ŀ | ĺ | | l | | VRAIMVGKAKRKPLELPLPRKI |
| | ľ | | | | | LNQKQYRIAGGIEEISATIKDLK |
| | | | | | | DAGVVIPTTSLFDSPIWPVQKT |
| | | | | | | DGSWRMTVDYRQINQVATPIA |
| | | | | | | AAIPDVASLLKQINTSPDTW/PI |
| | 1 | | | | | RPPISNGD*GVSGR*ACCLEPLA |
| | 1 | | | | | GPHR*ITSEASRILEQGPAIFCR* |
| | | | | | | LLSF*ETALGLLLGFGGN*TFDY |
| 4587 | 34955 | Α | 4628 | 3 | 354 | DSWA\VANGLA\GWS\GTWKK |
| | | | | | | HDWKI\NDNEIWGK\SMWIDLS |
| | ĺ | | | l | | EWSKTVKIFVSHESAHHIT*KSS |
| | | | | l | | AEEDFNNQVDRMIHSVDTTRPL |
| | | | | l | | SPATPVIAQWTHEQSGHGGRD |
| | | | | | | GGYTWAQQHGL |

524

| SEQ ID NO: | of peptide sequence | hod | SEQ ID NO: in USSN 09/540,217 | location of first codon for peptide sequence | codon for last amino acid of peptide sequence | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
|---------------|------------------------|-----|-------------------------------------|--|--|---|
| 4588 | 34956 | A | 4629 | 281 | 1529 | VRVLSPVEKELKLWKNTHKLL SYPTVGAAVTQLQNLTAMGVI GSHGARGQOVALNRQRQGDL QPFTRYTVHWGKG/NMQIFGGI LDTGSEETLIPGDPKHIEGPPV KVGAYGGQVINGVLAQVQITV GPQTHPVVISPVPECIIGIDILSS WQNPHIGSLTGRVRAIMVGKA KWKPLELPLPRKIVNQKQYHIL GGTVEISA TIKDLKDTEA VTPITT SPFNSPIWPVOKITOGSWMTU DYCKLNQVVTPIAAAVPDVVS LLEQINTSPGTWFEWSPKIKAL QQVQAAVQAALPFGPYDPADP MVLEVSVADRDAIWSLWNAAI GESQRRPJGFWSKALLSSADNY SPFERQLLASYWALVETERLTV GHQVTLRPELPIMNWVLSDPSS KVSGAQORGSIIKLKWYHIDD |
| 4589 | 34957 | A | 4630 | 453 | 719 | ARGSKHTGLIAQWAHEQSGHG GRAGGYAWAQQHGLPLTKAD LPIAMATAECPICQQQRPTLSPR YGTIPWWAWDAPGGRGCWRL QKAGE |
| 4590 | 34958 | С | 4631 | 122 | 325 | |
| 4591 | 34959 | A | 4632 | 1 | 346 | MAGEKVEKPDTKEKKPEAKKA DAGGKVQEGTGRYSRSAMYSR KAMYKRKYSAAKSKIEKKKEK VLATVTKPVGGDKNGGTQVF\ QIITYSSYTQKVQLPKSTLKQRQ GPCPQGAL |
| 4592 | 34960 | A | 4633 | 115 | 905 | EAFQTLHFCCLGLRQGTKRMA GGKVKKGNIKAVKPKEKRPT GGKVKKGNIKAVKPKEKGRPH USRNPVLCSBGFGRYSRSJAMY SRKAITYGEGSTFSPLKSKVEKK KKEKVLATVTKPVGGDKNGGT RVVKLKKMFRYYPTEDVPRKL LSHGKKVFSQHVRKLRASITP GTILJILLTGRHRGKRVVFLKQL AKLAYLLC*LGPLVLNRVPLRR THQKFCHLPLSTKLDISNVLIPK HLTDAYFKKKKLRKPRHQEGEI |
| 4593 | 34961 | A | 4634 | 2 | 350 | FVALAAVLCRQCLPRA WVCRR AGQGSGRHYRAAICAELKKPLT IEEVAP/DPVGPHEVRVDVHFC GVNFGDILICRDQYQERPHLPFT PGPVADSRKGLPIRSCCPPYNL WHCDFCS |

| SEQ ID | | | SEQ ID NO: | | | Amino acid sequence (X=Unknown, |
|--------|------------------------|-----|-----------------------|--|--|---|
| NO: | of peptide sequence | hod | in USSN 09/540,217 | location of first codon for peptide | codon for last amino acid of peptide sequence | *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
| | sequence | | 09/340,217 | sequence | or peptide sequence | acienon, (-possible nucleorde insertion) |
| 4594 | 34962 | A | 4635 | 1 | 556 | MGLKLNTHMDQTRGSLSGDTL |
| | | | | | | EGSPSKRAKIILKRGGFRGILGG |
| | | | | | | VGVOERRTGORPALPCHDLRR |
| | | | | l | | AEVVPDHRRGGPRPVGPHEDL |
| | | | | | | WOIPEKVSLOEAAVLPITYGTE |
| | | | | | | SFALEHRARTOPGEIVLVTAAA |
| | | | | | | GATGLAVMWQQISSGQGNIAA |
| | | | | | | AGSDEKCKLAM\EKGAQSSVN |
| | | | | 1 | | YSQGSLKDSATDQ |
| 4595 | 34963 | A | 4636 | 1 | 142 | TSQUSERDSATDQ |
| 4596 | 34964 | A | 4637 | 2 | 368 | |
| 4597 | 34965 | A | 4638 | 2 | 504 | HKVGHAQHHSFITWKWYTRD |
| 4397 | 34903 | A | 4036 | ľ | 304 | |
| | | | | ŀ | | WSRAGPEGT\GVPYDQLTEEEK |
| | | | | | | TRAWFTDGSARYAGTIRRWTA |
| | | | | | | AALQPLSRTSLKESGEGKSSQW |
| | | | | l | | AEVRAVHLVVHFTWKEK*PDV |
| | | | | 1 | | RLYTDSWAVANGLAGWSGTW |
| | | | | | | KKHDWKIDDNEIWGRGMWIDL |
| · . | | | | | | SEWSKTVKIFVSHESAHHIT |
| 4598 | 34966 | Α | 4639 | 182 | 840 | RTAVKGNLPTTPVI/SQWAHEQ |
| | l | | | | | SGHGGRDSGYTWAQQHGLLIT |
| | | | | | | KADLAMTTAECLISQQQRPRLS |
| | | | | | | LQYSSIPWGNQPATWWQIDYIR |
| | | | | 1 | | PLPSWKGQSQDSQDRSRNQGV |
| | | | | | | KVKVAPLTITPSDTTAKFLLHV |
| | | | | į | | PAALHSAGVDVLVPEGGMLPP |
| | | | | | | GGTTTIPLNWKLRLPPGHFGLLI |
| | | | | l | | PLSQQAKKRVTVLAGVIDLDC |
| | | | | | | QDEISLLLYNRDAKELYRYTAH |
| 4599 | 34967 | Α | 4640 | 3 | 283 | SRVSCSPPPLSPPPPLSPPPLSPP |
| | | l | | | | PLLSPPPPPLSPPPSPPPPVSLPPP |
| | | l | | | | PPVFSFPSSCP/PPFPPPLLPPLPPP |
| | | | | | | PPLSPPPPPPPWSPSPPI |
| 4600 | 34968 | Α | 4641 | 1 | 531 | MGSSHCTQPGMLAAAVGQAVP |
| | | 1 | | | | GTDTGADSVSLSASCCHQHAIH |
| | | | | 1 | | CAQAIRAKGHLQAHTELPSAPT |
| | | - | l | | | QPPSCARQCPKSGGDLGGRELY |
| | | | | | | NNHEIRSGKHIGVCISFANNRLF |
| l | | 1 | | | | VVSIPKSKTKEQILEEFIKVTGS |
| | | ŀ | | l | | YWVLGLSFDFRKWPV/GOCCO |
| 1 | | l | | l | | SFHGRLRATPARRAERRDARSF |
| | 1 | l | | l | | AL |
| | | | | L | L | r.= |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hođ | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 4601 | 34969 | Α | 4642 | 115 | 2405 | ATAEGSGSSGVKERGAGIRKAE |
| | | 1 | | 1 | | RRRTEASGGGGGRGRRRSWRR |
| | | | 1 | ŀ | | AGAEGVSEADARGRGGKGREG |
| 1 | | | l | 1 | 1 | KGGSRGGARAHRERARRRVEL |
| | | | | | | DRVCCQRRELRPPFYNSSTRAG |
| | | | | ĺ | | HREORARVSRNPIPSDRISPPOP |
| | | | | | | NGEISGNMATEHVNGNGTEEP |
| l | | l | | | | MDTTSAVIHSENFOTLLDAGLP |
| | | | | | | QKVAEKLDEIYVAGLVAHSDL |
| | | | | | | DERAIEALKEFNEDGALAVLQQ |
| 1 | | | | | | FKDSDLSHVQNKSAFLCGVMK |
| 1 | | | | | | |
| | | | | | | TYRQREKQGTKVADSSKGPDE |
| | | | | | | AKIKALLERTGYTLDVTTGQRK |
| 1 | | | | | | YGGPPPDSVYSGQQPSVGTEIF |
| | | | | 1 | | VGKIPRDLFEDELVPLFEKAGPI |
| | 1 | | | | | WDLRLMMDPLTGLNRGYAFV |
| 1 | | 1 | | | | TFCTKEAAQEAVKLYNNHEIRS |
| | | 1 | | | | GKHIGVCISVANN\RLFVGSIPK |
| | | | | l | | SKTKEQILEEFSKVTEGLTDVIL |
| | | | | | | YHQPDDKKKNRGFCFLEYEDH |
| 1 | | | | | | KTAAQ\ARRRFN*VGKVQGFG |
| | | | | | | GNVGTVEWADPIEDPDPEVMA |
| | i | | | | | KVK\VLFVRNLANTVTEEILEK |
| l | | | | | | AFSQF\GKLERVKKLKDYAFIHF |
| | | | | | | DERDGAVKAMEEMNGKDLEG |
| 1 | ŀ | | | | | ENIEIVFAKPPDQKRKERKAQR |
| 1 | | | | | | QAAKNQMYDDYYYYGPPHMP |
| | | | | | | PPTRGRGRGGRGGYGYPPDYY |
| | | | | | | GYEDYYDYYGYDYHNYRGGY |
| İ | | | | l | | EDPYYGYEDFQVGARGRGGRG |
| | | | l | | | ARGAAPSRGRGAAPPRGRAGY |
| 1 | | | | | | SQRGGPGSARGVRGARGGAQQ |
| 4602 | 34970 | Α | 4643 | 2 | 369 | |
| 4603 | 34971 | Α | 4644 | 1 | 1002 | MNAGCGQTHDCAYRQKRPED |
| | i | | ŀ | | | VNEEGRLEQRNRKRQDEWGPR |
| | | | | | | DKPASSGYKAGTLDVENWNRA |
| İ | | | | | | GEGLKHAHQKGLKVDSSAFCT |
| i | | | | | | CSLIRTVLMPLSPYYSAGQQAE |
| | | | | | | SKNLKESVVPPTASIENKKOER |
| | | | | | | EDKNWPILPPPVAETSVPPPSVA |
| | | | | | | GIETPIQRILRSAAIAGEPSGPCA |
| 1 | | | | | | FPISVRPDSNNPQQFIHEHTPLEF |
| ŀ | | | | | | KLLNELKTSVVNIGVQSPFTLG |
| 1 | | | | | | LPESAFGAMRLLPFDVKHWAR |
| | | | | | | TCLSASAYLTWNLNGQEMCTD |
| 1 | | | | | | OVRONRAAGHGDIAEDMLLGN |
| | | | | | | GP/YFRPGTSNGTKRAWATIPEE |
| | | | | | | |
| | l | | | | | GVPVQSFLPFMEGSQEPSAQFL ARLREAV |
| 4604 | 24072 | D | 1615 | ļ | 676 | AREREAV |
| 4604 | 34972 | В | 4645 | I | 575 | |

| SEO ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|----------|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | 1 | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| | 0.070 | <u> </u> | 1000 | | lend | |
| 4605 | 34973 | Α | 4646 | 1 | 776 | VVLMRNLMSGTIFSMLANISMI |
| | | l | | | | GSLVIIIQYITQEIPDPSRVPLVA |
| | | | | ł | | SWKTYPLFFGTAIFSFESIGVDL |
| | ŀ | 1 | | ł | | PLENEMKNARHFPPILTLGMPI |
| | | | | | | VTTLDIGMAALGYLRFGD\DTK |
| | | | | | | GSIILSLPICWYLHGLSGEGPSQ |
| | | | | | | SFSERETKAQVIVPRSEVNVPRR |
| | | ı | l | | | PVSEHSGRGEQLCGLSCRLYQS |
| | | ı | | i | | VKLLYIAGILCTYALQFYVPAEI |
| | | | | l | | IIPFAISRVSTRWALPLDLSIRLV |
| | l | l | i | l . | | MVCLTSAPMTRSTPFCKYSTRG |
| | | | | | | RRRWLEIPV |
| 4606 | 34974 | Α | 4647 | I | 1294 | MGKDFMSKTPKAMATKTKIDK |
| | | | | ł | 1 | WDLIKRKSFCTAKETTIIVNRQP |
| | | 1 | | | | TEWEKIFATYSSHKELISRIYTE |
| | | | | | | LKQIYKKKTNNPINKWAKDMN |
| | | 1 | | | 1 | RHFSKEDIYASKKHMKKCSSSL |
| | | 1 | | | | AIREMQIKTTMRYHLTPVRMEI |
| | | l | | | | KKSGNNRQPIVGPCDNSVILLY |
| | | | | | | KILANRIQOHIKKLIHHDOVGFI |
| | | | l | | | PGMQGWFNTCKSINVIQHINRT |
| | | | i | | i | KDKNHMIISIDAEKAFDKIOOPF |
| | | | l . | | | MLKTLNKLGIDGMYLKIIIAIYD |
| | | ļ | ' | | - | RPTANIILNGQKLEAFPLKTGTR |
| | | | ł | | | QGCPLSPLLFNIVLEVLARAIRO |
| | | | | | | EKEIKGSOLGKEEVNLSLFADN |
| | | | | | | MIVYLENPIISAONLPKLINNFS |
| | | | | Į. | | KVSVCKINVOKPOAFLYTNNR |
| | | | | | | QTESQIMSELPFTIASKRIKYLVI |
| | | ĺ | | | | QLTRDVKDLFKENYKPLLNE/I |
| ĺ | | 1 | | | | K/EDTNKWKNIPCSWVGRINIV |
| | | 1 | | | | KMAILSK |
| 4607 | 34975 | A | 4648 | 2 | 711 | WNRRPCIAKTIL/SOKNKAGGI |
| 1.00. | 5.575 | Γ. | 1.0.0 | Ĩ | l''' | TLPDFKVYCKSTVTKTAWYWY |
| | | 1 | | 1 | | ONRHIDRWSRTETSEITPHIYNH |
| | | | | | | QIVDKPHKNKQWGKDLLFSKW |
| 1 | | | | | | CWENWVAICRKLKLNLFLTRY |
| | | | | | | |
| l | | 1 | | ĺ | | TKINSRWIKDLHEKLKTIKTLEE |
| | | 1 | | | | NLGNTIQDIGIGKDFMTKMPKA |
| l | | 1 | | | | IATKAKIDKWDLIKLKSFCTAK |
| | | | | | | ETIIRVNKQPTEWENISAIYPSD |
| | | | | | | RSLISRIYKE\LKNIYKRLDAVA |
| | | | | | | HTCNPITLKGQGRWIT |
| 4608 | 34976 | Α | 4649 | I | 576 | |
| 4609 | 34977 | Α | 4650 | <u> </u> | 771 | |

| SEQ ID | | | SEQ ID NO: | | | Amino acid sequence (X=Unknown, |
|--------------|----------------|--------|------------|-------------------------------|---------------------|---|
| NO: | of peptide | hod | in USSN | location of lirst | | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 4610 | 34978 | A | 4651 | 1 | 887 | FPEDSEPISISHGNYTKOYPVFV |
| 1010 | 3.4570 | ^` | 105. | ľ | 007 | GHKPGRNTTORHRLDIOMIMIM |
| 1 | | | | | | NGTLYIAARDHIYTVDIDTSHTE |
| | | | | | | EIYCSKKTAWEILDRPMVATCR |
| | | | | | | MKGKHKDE\CHNFIKVLLKKN |
| | | | | | | DDALFVCGTNAFNPSCRNYKM |
| | | | | | | DTLEPFGDEFSGMARCPYDAK |
| ŀ | | | | | | HANVALFADGKLYSATVTDFL |
| | | | | | | AIDAVIYRSLGESPTLRTVKHDS |
| | | | | | | KWLKEPYFVQAVDYGDYIYFF |
| | | | | | | FREIAVEYNTMGKLLGLHHELL |
| İ | | | | 1 | | RRTQDYGHKAGCPESCLLSVRR |
| l | | | | | | CPPPQSKAHRESVEELIKGCRR |
| 1 | | | | 1 | | HAGFCACGHITT |
| 4611 | 34979 | A | 4652 | ı | 2890 | MVLLKVDPGLWGSSLRVLLKA |
| | 1 | | | | | DPPYGTQAHAERHGRALAGGL |
| | | | | | | GVGEQSQSLDLLRMSHTYGAL |
| | | | | | | FLPRAAVSSWCASVRIRKIKKSP |
| | | | | | | LLDGAPLLYEPDTWLGKWSSS |
| | | | | | | WTLVFTHPFSAALTHSALTARS |
| İ | | | | | | DTGSLTLSPDGKLYSATVTDFL |
| İ | | | | | | AIDAVIYRSLGESPTLRTVKHDS |
| | | | | | | KWLKEPYFVQAVDYGDYIYFF |
| | | | | | | FREIAVEYNTMGKVVFPRVAQ |
| | | | | | | VCKNDMGGSQRVLEKQWTSFL |
| | | Ļ | | | 100 | KARLNCSVPGDSHFYFNI |
| 4612 | 34980 | Α | 4653 | 1 | 480 | MEGVEEKEKVPAVPETLKKKQ |
| | | | | | | GNFAELKIK\PKMAFVLRIRGVS |
| 1 | | | | i | | GVSPKVRKVLQLLRLHQIFSGT |
| | | 1 | | ł | | FVKLN/KASVNMLRIVEPYIAW |
| | | | ŀ | l | | GYPNLKSVNELIYKRGYGKINK |
| | | 1 | | | | KRIALTONTLIVPSLGKYGILCM EDLIHEIYTVGKHFKEANNLLW |
| | | | i . | | | |
| 4612 | 24001 | - | 4654 | | 279 | PFKLSSP |
| 4613 4614 | 34981 34982 | A B | 4655 | 119 | 177 | · |
| 4615 | 34982 | A | 4656 | 157 | 359 | HORCRK**TKLEG*TCRKIEVN |
| 7013 | 34903 | ľ^ | 17030 | 137 | 337 | TDYIKP*E*EFWMIYYISIYLTSI |
| | | | | l | | CSSICNENILQLENREKSRNT |
| | L | L | | L | l | COSICIAENIEQUENKEKSKNI |

| SEQ ID | SEQ ID NO: | | SEQ ID NO: | Nucleotide | | Amino acid sequence (X-Unknown, |
|--------|------------|-----|------------|-------------------------------|---------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | |
| | sequence | 1 | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 1 | | | 1 | scquence | | |
| 4616 | 34984 | Α | 4657 | 65 | 900 | GLAFPPILOKESPHPCLWILFTSP |
| | | | | | | VALSTSRPPCVISSAALCPRRHG |
| i | | | l | | i | FLPPRLLAPLAAAFCPRPRCFLP |
| | | | | | | LPPRLFAPAPVDFCPRRCGFLPL |
| | l | | | | | PPRVFAVSCPRRRGLLPPLLFAP |
| | ľ | | | | | SAAAFCGFLAPSPWLFAAFGTR |
| | | | | | | CRGFLGLLVPAAAAFFPRRLRF |
| | | 1 | İ | | | FLPRLFSPAAAVTFCHPCFLPPP |
| | | | | | 0 | PRLSVPAAASFCRRGFQQEIRTV |
| | 1 | | İ | | , | EIRGSGTRVGLQHQTGHLPRGP |
| | İ | 1 | | | | SSLPAELHA*ARVSPLEASPPSC |
| | | 1 | l | | | TR/WMQQPEDLGPALTLGRICG |
| | | | i | | | VGACWEL |
| 4617 | 34985 | A | 4658 | 927 | 1157 | ARRSTAPVDCK*LQP*AQAAL |
| | | | | | 1 | WVLVWDHEAARQPEGVVQPA |
| ļ | 1 | l | | | | PGLWPSSRRWRKFQAPGSSGV |
| | | İ | | | 1 | CHPGALQACPEELS |
| 4618 | 34986 | Α | 4659 | 1 | 563 | MKLVAVFDKQDLHHGGDDISA |
| | | | | | | SSMHTQSPERFTSASELGTNNV |
| | | | | | | SAFSV\YQAASEIEVTSSVLHAS |
| 1 | 1 | | | | | SQKGLSSQHLGFGAPQAGGGSF |
| ŀ | | i | | | | RHLAPQRKEVLEEYFKYDPEH |
| | | 1 | | | | KLIFRFVRTLFKAMRLTAEFAIE |
| | | 1 | | | | ITHGGRDVERATGLVNKIHRQG |
| | | 1 | | | | CGDSFCNIGGNAKPYVCCGKE |
| i | | 1 | | | | YVSSSKHQNGIAI |
| 4619 | 34987 | Α | 4660 | 1 | 681 | MGKYAEALRSQQKAVLMSVR |
| | | 1 | | | 1 | VMGIEHPNTIQENMHLALHCFT |
| | i | 1 | | | | SRQLSLALSLLQGAHYLM/LLV |
| | | 1 | | | | LGE/DHPEVA/LLDNIRRVLHRV |
| | | 1 | | | | MEYDLSLCFLDNALAVSTKYQ |
| l | ŀ | 1 | | į. | 1 | GPKALKVALGHHLITSVYESKA |
| | | 1 | | | | EF\RSALQHQKEGLAAH/TSLGE |
| | | 1 | | | | DQEKTKESSEYLKCLTQLAVAL |
| | | 1 | | | | RRAMHEIYRNGSSNNIPPLNFT |
| | | 1 | | | | APSMASVLEQFKGINGILFIPLS |
| | | ļ | | | | QKDLESLKAEVAQ |
| 4620 | 34988 | A | 4661 | 2 | 443 | VWQSGGDSITSKTNIITCVNCY |
| | | 1 | | | | LYTCIDSSFNQYHSILIVRARQD |
| | | 1 | | | | IWLPVALHRPWESSPFIHVINNI |
| | | 1 | | | | LQKILKRSTQFIFTLIAIIMGLIA |
| | | 1 | | | | VTVIAATAGVALRQSIQTVHFV |
| | | I | | 1 | | DKWQKNSTRMWNS/QRIDQKL |
| | | I. | | | | ANQINDLRQTVIW |
| 4621 | 34989 | Α | 4662 | 2 | 377 | FAFTWTDPDTHQAQQITWALL |
| | 1 | 1 | 1 | | | PQGFADSPHYFSQAQISSSSITY |
| | | | 1 | | | LGIILHENTRALPADHV*LISQT |
| 1 | 1 | 1 | 1 | | | PISSTKQQLLSFLGMVRYFCLWI |
| 1 | 1 | 1 | 1 | | | PSFTILTKPLY*FTKANLADPTD |
| | L | L_ | 1 | | | PKSFPHSSFRSL |

| SEQ ID NO: | SEQ ID NO: of peptide sequence | Met | SEQ ID NO: in USSN 09/540,217 | Nucleotide location of first codon for peptide sequence | Nucleotide location of last codon for last amino acid of peptide sequence | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide detetion, \=possible nucleotide inserti |
|---------------|--------------------------------------|-----|-------------------------------------|--|---|--|
| 4622 | 34990 | A | 4663 | li . | 1095 | MAKAVLSKKNKTGSTTLPD |
| | | | | | | YYKDIVTEEPGIETLRHTSST |
| | | 1 | | | | SKGLPSRESFSEKQNKTTTH |
| | | ŀ | | l | | PGEINSFIAHTKPA WRSLHT |
| | | | | | | HEIWCRDSDQVNSPGRSIPC |
| | | | | | | LCSMRKIHLRPLVLRPASPR |
| | | 1 | | | | PILNPLHLIAALLPNPKPPFR |
| | | l | | | | VSPDLNPQVKDISTPSWATE |
| | | ŀ | | | | HLTVSLKPYHPYPAQCQYPI |
| | l . | 1 | | | | HALKGLKPVITRLLQHGLLF |
| | i . | 1 | | | | NSPYNSHILPVLKPDKPYRL |
| | | 1 | | | | QDLRLINHIVLLPIHPMVPNI |
| | | 1 | | | | LLSSIPASTTHYSVLDLKHA |
| | | 1 | | | | IPLHPSSQPLFAFTWTDPDTI |
| | 1 | 1 | 1 | | | QQIT*AVQPQSFTDSPHYLN |
| | 1 | 1 | | | | QISSSSVTYLGIILIKAHVLSI |
| 4623 | 3499I | Α | 4664 | 655 | 2417 | KKRESMNIDAKILNKILANF |
| | | | | | 1 | QHIKKLIHHDQVGFIPGRQG |
| | | İ | | | | NICKSINVIQHINRAKDKNH |
| | | | 1 | | | SIDAEKAFDKIQQLFMLKTL |
| | | | | | | LGIDGTYFKIIRAIYDKPTAN |
| | | | | | 1 | NGKKLEAFPLKTGTRQGCP |
| | | | | i | | LLFNIVLEVLARAIRQEKEIF |
| | | | i | | | QLGKEEVKLSLFADDMIVY |
| | | | 1 | | | PIVSAQNLLKLISNFSKVSG |
| | | | | | | NVQKSQAFLYTNNRQTESQ |
| | 1 | | 1 | | 1 | ELPFTIASKRIKYLGIQLTRD |
| | | 1 | | | | DLFKENYKPLLKEIKEDANI |
| | | 1 | 1 | | | KNIPCSWVGRINIVKMAILP |
| | | | i | | | YRFNAIPIKLPMTFFTELEKT |
| | | | 1 | | | KFIWNQKRAHITKAILSQKN |
| | | | 1 | | | RGITLPDFKLYYKATVTKTA |
| | 1 | | 1 | | | YWYQNRDIDQWNRTQPSEI |
| | 1 | | | l | | HIYNYLIFDKPDKNKQWGK |
| | 1 | | | | | LFNKWCWENWLAICRKLKI |
| | 1 | | | | | FLTPYTKINSRWIKDLNVRP |
| | | | | | | TKTLEENLGITIQDIGMGMD |
| | | 1 | - | 1 | 1 | SKTPKAMATKDKIDKWDLI |
| | | 1 | 1 | 1 | | KSFCTAKETTIRVNRQPTKW |
| | | 1 | 1 | 1 | | \FSQPTHLTKG*YPESTMNSN |
| | | 1 | | | | TRKKQTTPSKSGRR\NEQTL |
| | | 1 | | | 1 | RGHLCSQKTHEKMLTITGH |
| | 1 | 1 | 1 | 1 | 1 | NANQNHNEIPSHTC |

| SEO ID | SEO ID NO: | Met | SEO ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|----------|------------|-------------------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540.217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 4624 | 34992 | A | 4665 | I | 234 | MONOEKFGELISEWAPYGRPRF |
| | 1 | | | | | QIAVGDHHISVYDGEVNWRMS |
| | 1 | | | | | SLQASAAGKDYANRGTEWGEE |
| | Ì | ŀ | | i | | PSQMLRHELLSGEMCVSRNRG |
| | | ľ | | | | QPLANSERRSEALSPVTPKKLIP |
| 1 | 1 | l | , | | | ADGHKSDPGRTWMKLETIILSK |
| | | | | | | LTQEQKTKHHMFSLISG*FAEN |
| Ì | 1 | | | | | DGFQLHPCPS\GSLLWPSAGISF |
| | | l. | | | | FGVTGLRASDLLSLLARGCPRF |
| l | | | | | | LDTHISPLSSS |
| 4625 | 34993 | В | 4666 | 1 | 2553 | |
| 4626 | 34994 | Α | 4667 | 33 | 272 | |
| 4627 | 34995 | A | 4668 | 1 | 3045 | |
| 4628 | 34996 | Α | 4669 | l | 334 | |
| 4629 | 34997 | Α | 4670 | 159 | 245 | FPIVASPWLLC*LMSFAGTWVK |
| 1 | | ľ | | | | LETIILSKLSHGQKTKHRMFSLI |
| i | | ŀ | | | | DTVVVGSDDFPLLRVPGCCASS |
| | | | | | | LNAAHTSVNIKLELT |
| 4630 | 34998 | Α | 4671 | 122 | 359 | TANLKNGRKFL*PIHLTKG*YPE |
| | 1 | ŀ | | | | STKNVNKFTRKKQTTPSKSGQK |
| | | | | | | I*TNTSQKKTFMQPTGT*KNAH |
| | | | | | | HHWSSEKCKSKP |
| 4631 | 34999 | Α | 4672 | 2 | 66 | RLVYADTCFSTIKLKAEDASTS |
| | | ŀ | | | | ENMRCLVFCACDSLLRMIVSSF |
| | | ļ | | | | IRVPTKDMYSSFFMAA*YLLQY |
| | | | | | | HQVKSRRCFYE |
| 4632 | 35000 | Α | 4673 | 519 | 899 | SALVCHTCSNWQVHLGDSVFY |
| | | ŀ | | | | RSEEQPLEPLPFSYLSSLFPGLHP |
| | 1 | | | | | DPVSSGSQQPS*MPHTDASVTS |
| [| 1 | ľ | | İ | i | SHGLGGLAGRNSCIYPCCAPAL |
| ł | 1 | | | i | İ | CADYLWGSPDLFLLLSFQHKG |
| | 1 | | | | | NVGVGLAHSPQFQQGN |
| 4633 | 35001 | A | 4674 | 1 | 278 | |
| 4634 | 35002 | Α | 4675 | 158 | 592 | GYYWRPSFQSLRENNECQRKS |
| | | | ļ | l | | NSVNAGCLNCDHCVLGIYQQH |
| 1 | 1 | 1 | l | l | l | *QNYFSFDIHYFLSETGRKVSSS |
| l | 1 | | l | 1 | | I/AYFTIGETEALSGKVVPYWQQ |
| | 1 | ł | | 1 | | AAGQGCTLHLLLPQTRLFPGKG |
| | | <u> </u> | | | | RRQPGLLREF |
| 4635 | 35003 | Α | 4676 | 302 | 721 | |
| 4636 | 35004 | В | 4677 | 1 | 871 | |
| 4637 | 35005 | В | 4678 | 1 | 559 | L |

| SEQ ID | | | SEQ ID NO: | Nucleotide | | Amino acid sequence (X=Unknown, |
|--------|------------------------|-----|-----------------------|--|--|---|
| NO: | of peptide sequence | hod | in USSN 09/540,217 | location of first codon for peptide | codon for last amino acid of peptide sequence | *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
| 1 | sequence | | 09/340,217 | sequence | or peptide sequence | deletion, (-possible nucleotide inscrition) |
| | | | | | | |
| 4638 | 35006 | Α | 4679 | 3 | 2386 | RVATMAPHRPAPALLCALSLA |
| | | | | | | CALSLPVRAATASRGASQAGAI |
| | | l | | | | QGRVPEARPNSMVVEHPEFLK |
| | | | | l | 1 | AGKEPGLQIWRVEKFDLVPVP1 |
| | | | | | | NLYGDFFTGDAYVILKTVQLR |
| | İ | | | | | GNLQYDLHYWLGNECSQDESC |
| | | | | | | AAAIFTVQLDDYLNGRAVQHR |
| | | | | | | EVQGFELAP\FLGYFKSG\LK\Y |
| | | 1 | | | | KKGGVASGFKHVV\PNEVVVQ |
| | | | | | | RLFQ\VKGRRVVRATEVPVSWE |
| | | l | | İ | | SFNNG\DCFIL\DLGN\NI\HQWC |
| | | | | I | | GS\NSNRYERLKATQVS\KGIRY |
| | | l | | l | | NERSGRA\RVHVSEEGTEPEA\M |
| | ŀ | | | | | LQVLGPR\VALPAGTEDTAKED |
| | | | | I | | AAN\RKLAKLYKVSNGAGTM\ |
| 1 | | | | l | | YVSLWAD\ENEFTQGA\LKSED |
| | | l | | 1 | | CFILDHGKDGKIFVWK\GKHAN |
| i | | | | | | TEERKAALKTASGFHSPRWDY |
| | | l | i | l | | PKQIQVSVPFLEGG\ETPLFKQV |
| | | | | ł | | FKNWRDPDQTDGLGLSYLSSHI |
| | | | | l | | ANVERVPFDAATLHTSTAMAA |
| | | | | | | QHGMDDDGTGQKQIWRIEGSN |
| ŀ | Ì | | | i | | KVPVDPATYGOFYGGDSYIILY |
| | | | | | | NYRHGGRQGQIIYNWQGAQST |
| į | | l | | 1 | | QDEVAASAILTAQLDEELGGTP |
| | | | | | | VOSRVVQGKEPAHLMSLFGGK |
| İ | | l | | | | PMIIYKGGTSREGGOTAPASTR |
| | | l | | | | LFOVRANSAGATRAVEVLPKA |
| İ | | | | | | GALNSNDAFVLKTPSAAYLWV |
| | | 1 | | 1 | | GTGASEAEKTGAQELLRVLRA |
| | | l | l | 1 | | QPVQVAEGSEPDGFWEALGGK |
| | | 1 | | | | AAYRTSPRLKDKKMDAHPPRL |
| 4639 | 35007 | A | 4680 | 1894 | 2161 | MFGLPNARAATSTAPFASHSLC |
| 1000 | 155007 | Γ. | 1.000 | 1.077 | | LCFRILLLLGPGINLANPRNHLV |
| | 1 | 1 | | | | LHQKFSILGRHFSL\ATEEPCISL |
| | | l | | l | | ALAPSKRWECNSSS*RYENN |
| 4640 | 35008 | A | 4681 | 1 | 1803 | TIEST CONTROL REPORT |
| 464I | 35009 | A | 4682 | i - | 501 | MTFQCVVNTHYLTYPRPQRFL |
| 1041 | 33007 | ľ | 14002 | 1 | 501 | YLVVVRPSCASWIMFVLIDRGY |
| | | 1 | | | | VFSYFPOSYGGFGSRILSKPIEV |
| | | 1 | | | | QVGGRSVVAQMWSNKCGQYS |
| 1 | | 1 | | | | DLASLGCISR/YSAGSVYYYPSY |
| 1 | | 1 | | | | HHQH/NPVQVQKLQKELQRYL |
| 1 | | l | 1 | | | TR/KIGFEAVMRIRCTKAKPTRH |
| 1 | | l | | l | | RHYGELEISITIIRAIGK |
| 4642 | 25010 | _ | 4602 | 350 | 623 | KIT I GELEISI HIKAIGK |
| 4642 | 35010 | Α | 4683 | 1330 | 023 | l |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \-possible nucleotide insertion) |
| | | | | sequence | | |
| 4643 | 35011 | Ã | 4684 | 1 | 3252 | PPGPERSRLGLGVSLHQRSCPK |
| | | | | | | CIAVFTRVSEPRIQFPASRILPSS |
| | l | | | | | NTSKDFDPVSGQSNYGGSQGS |
| | | | | | | GQTLNRPPVASNPVTPSLHSGP |
| | | | | | | APRMPLPASQNPATTPMPSSSF |
| | | | | | | LPEANLPPPLNWQYNYPSTASQ |
| | 1 | | | | | TNHCPRASSQPTVSGNTSLTTN |
| | | | | ļ. | | HQYVSSGYPSLQNSFIKSGPSVP |
| ŀ | 1 | l | | ŀ | | PLVNPPLPTTFQPGAPHGPPPAG |
| | | | | | | GPPPVRALTPLTSSYRDVPQPLF |
| | | | ļ | l | | NSAVNQEGITSNTNNGSMVVH |
| | | | | l | | SSYDEIEGGG |
| 4644 | 35012 | В | 4685 | 51 | 236 | |
| 4645 | 35013 | Α | 4686 | 1004 | 1405 | |
| 4646 | 35014 | Α | 4687 | 1 | 771 | |
| 4647 | 35015 | A | 4688 | 1 | 405 | SENVDDVSVMMG/TPANKALL |
| | | | | | | DTTGFWHD/DFNNATPNDICVA |
| | | | | | | IRSE/AADAGIAQAIMQQLEEA/ |
| | | l | | | | LKQQA/LDRNLNVMMFSDNVT |
| | 1 | | | | | LE/DEIQLK/TRAREKGLLV/MG |
| | İ | | | | | PDCGTSMIAGTPLAFA/NVMPE |
| | | | | | | GNIGVIGASGTGFRR |
| 4648 | 35016 | В | 4689 | 1 | 1656 | |
| 4649 | 35017 | Α | 4690 | 1657 | 2259 | LPQPQPATPWPSAPTPRFASPAA |
| l | ŀ | | | | | AMATLWSGTCRIRLWSGSSRA |
| İ | | | | | | TRTAPAALIFPITALGSGQGAW |
| | | | | | l | TTRCAAGTCGRAASCSSMTSA/ |
| | | | | | | AQIFSPCHCPNQDWLAVGMESS |
| | | | | l | | NVEILHVGKPEKYQLHLHESCV |
| | | l | | | | LSLKFAPCGRWFVSTGKDNLL |
| | | 1 | | l | | NAWRTPYGASIFQSKESSSVLS |
| l | | 1 | l | l | | CDISRNNKYIVTGSGDKKATVY |
| | | | | İ | | EVVY |

534

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X-Unknown, |
|--------|------------|----------------|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | ŀ | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 4650 | 35018 | A | 4691 | 62 | [1371 | ONOSTISVMLRSAMTTTMAAD |
| | | 1 | | | | LITAI/MGQRKQHIDTGFWHDD |
| | | 1 | | | l | FNNATPNDICVAIRSEAADAGI |
| | | | | | | AQAIMQQLEEALKQLAQGSGS |
| | | 1 | | | | SQALTQVRRWDSACQKLPDAN |
| | | ſ | | | | LALISVAGEYAAELANQALDR |
| | | | | | | NLNVMMFSDNVTLEDEIOLKT |
| İ | | | | | | RAREKGLLVMGPDCGTSMIAG |
| | | l | | | | TPLAFANVMPEGNIGVIGASGT |
| | | 1 | | | | GIQELCSQIALAGEGITHAIGLG |
| | | | | | | GRDLSREVGGISALTALEMLSA |
| ł | | | | | | DEKSEVLAFVSKPPAEAVRLKI |
| i | | | | | | VNAMKATGKPTVALFLGYTPA |
| | | | | | 1 | VARDEN/VWFGSSLDEA\SLAG |
| | | 1 | | | | CFSVRARSPLTRIDGMMILGMF |
| ŀ | | l | | | | GGCFAASLWANNVKLRMPRSR |
| | | | | | | IRIMOAIIGGIIAGFGARLAMGC |
| | | | | | | NLAAFFTGIPQFSLHAWFFANP |
| | | l | | | | LLIGOTLEDPHEYIDYLDKEFPL |
| 1 | | l | | | | YQLVECVVSLNYSYHWECTEI |
| 4651 | 35019 | A | 4692 | i - | 1125 | MEAEVDKLELMFOKAESDLDY |
| 4051 | 33019 | ^ | 4072 | l, | 1123 | IOYRLEYEIKTNHPDSASEKNPV |
| | | 1 | | | | TLLKELSVIKSQYQTLYARFKP |
| | | | | | | VAVEQKETKSRICAGMTKTMN |
| | | - | | | | VIOKLOKOTDLDLSPLTKEEKT |
| | | 1 | | | | AAEQFKSHSFGMWPCKLKYRQ |
| | | 1 | 1 | | | NKKKKKKLSONRSTTWKLNNL |
| 1 | | 1 | | | | LLNDYWIQNEMKAEIKMFFET |
| i | | 1 | | | | NENKOTTYQNLWDTFKAVCRO |
| i | | 1 | | | , | KFIALNAHKRKQERSKIDTLAL |
| | | | | 1 | | QLKELEEQEQTHSKASRRQEIT |
| | | 1 | | | | KIRAELKEIETQKNLQKINESRS |
| 1 | | | | 1 | | CFFEKINKMDRLLARLIKKKRE |
| | | | | | | KNQIDAIKNDKGGITNDPTEIQT |
| | | | | | | TIREYYKHLYANKLENLEEMD |
| | | 1 | | Į. | | KFLDTYNLPRLNQEEVESLNRP |
| l | | 1 | | | | TGSEIEARINSLPT\KKSPGPDGF |
| 4652 | 35020 | A | 4693 | 2 | 421 | GRVGGRVGKIRT*LN*IETKKY |
| 4032 | 33020 | I ^A | 4093 | | 721 | KR*NETKSWFFEKIKMDRPLAR |
| 1 | | 1 | | | | LTKKRIKEIOITSLRNETGNIITD |
| | | 1 | | | | , |
| | | 1 | | | 1 | TTEIHKIIQG*SSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSS |
| | | l | | | | SS\FSSSSSSSSSSSSSSDTFKRPIT |
| L | | <u> </u> | | <u> </u> | | GIKIEMVF*KLPTKKSRISL |

| SEQ ID NO: | SEQ ID NO: of peptide sequence | Met hod | SEQ ID NO: in USSN 09/540,217 | Nucleotide location of first codon for peptide sequence | Nucleotide location of last codon for last amino acid of peptide sequence | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
|---------------|--------------------------------------|------------|-------------------------------------|--|---|---|
| | | | | Sequence | | |
| 4653 | 35021 | Α | 4694 | I | 654 | MEYYAAIKNNTFMSFAATWM |
| | | | | l | | KLEAIILSKLTKEQKTKRHMFSL |
| | | | | l | | VSTLELGALTALVRCGRWRRO |
| | | | | | | CDDEAMACVTQGRPLARLTKK |
| | | | | ĺ | | RREKIQITSLRNETGDITTDTTEI |
| | | | | | | QKIIQGYDEHTYAHKVENLEG |
| | | | | l | | MDKLLEKYNPPRLNQEELGTL |
| | | | | ĺ | | NRPITSYEMEMIIKKL/PNEKSP |
| | | | | l | | GPDGFTAEFYQTFKEELVPILLA |
| | | ĺ | | i | | LFHKTEKEGILPNSFYEASITL |
| 4654 | 35022 | Α | 4695 | 1 | 786 | MPPSLAYKNPRPQQADTQVA/T |
| | | | | l | | MSRGVHWRKKMQAAGPREDV |
| | | | | | | KRSTQAEEHTDRHQHTSR\HQL |
| | | | | ! | | LLMRIFEMGWKKPSPFQEESIPI |
| | | | | l | | ALSGRDILARAKNGTGKSSAHD |
| | | | | | | IPLLKRLDLKKDTIQTIVIVPTG |
| | | | | 1 | | GPALQVSQICIQVSKHMGGVK |
| | | | | l | | VVMTTGGTNSGDDVLRLDDTV |
| | | | | | | HMVIAAPGRILNLIKKGVAKLE |
| | | | | Į. | | ETYLRHIGRPGHFGHFGLAINLI |
| | | | | | | TYGDHFNLKGIEEQLGKEIKPIP |
| | | | | l | | SNIDKSLHVAEFHSKAVENEKP |
| 4655 | 35023 | В | 4696 | 1 | 501 | |
| 4656 | 35024 | Α | 4697 | 2 | 573 | YSACFFLFSIAMGILLTVPPSFWI |
| | | | | 1 | | PTSFSAFLGFFSSFSLLVLHQPD |
| | | | | | | FSFVLGLWRIISLLVLKIVEGSS |
| | | | | | | NQGMQMASRSWEWPSSSRKM |
| | | | | l | | ATSVRTLPEP/GPSGCRAPSAFPF |
| | | | | İ | | RKEAGADPSGCPGGRQVPLVAI |
| | | | | 1 | | GRGGALEPQRWELRAPGSAGR |
| | | | | l | | LPREGGRTFPGAQSPAGAQSPA |
| | | _ | | | | GKQSPPGAQSPLH |
| 4657 | 35025 | Α | 4698 | 2 | 346 | PPINISVPHC*PFGG/EPLEILIPAP |
| | | | | 1 | | ERSSHVLSQSPVRTHSSAVHQS |
| | | | | ĺ | | VGASLNCGDKQPPNFSGSKIFF |
| | | | | ŀ | | LIYLHLMTGQVRGSSVLCHPNT |
| | | | | | | GIQKEGGTVNEIPIAIEKRKKHA |
| 4658 | 35026 | В | 4699 | 1 | 468 | |
| 4659 | 35027 | Α | 4700 | 2 | 284 | ETGEFTQLKELNIQGNCWTLLL |
| | | | 1 | 1 | | PELGNLYLTGQKKVCKVENSP |
| | | | l | 1 | | WVTPIAGQFQLDVSCVSECVCS |
| | | l | 1 | l | | ETYEYLYGQHMQ\ANP\EPPKH |
| | | | ļ. <u></u> | | | NNHKSGKD |
| 4660 | 35028 | Α | 4701 | 5 | 189 | |
| 4661 | 35029 | Α | 4702 | 38 | 190 | |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | | | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------------------|---------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 4662 | 35030 | IA | 4703 | 2 | 882 | WPSVSSG/PSSAVSFSSFDPGVA |
| | | | | | | SCTSSSASGIORPMASEVPCASG |
| | | | | | | IPIKKIGHRGVDSSGETTYRKTT |
| | | 1 | | | | SSALKCAIOLCITHTVGSLDPTP |
| | | | | | | ERHVLIEPLIELSSSGADGSLLH |
| | İ | 1 | | | | VSIHDEFIIKTVOHKOAEFLOKL |
| | 1 | | | | | IPGYHIDLNONSWTLLPKFYGL |
| | 1 | 1 | | | | CCVKAGGKNTOIAVMKNLLLR |
| | 1 | 1 | | ļ | | LNSEGERILLCIGITDILQSYRFV |
| | | | | | | KKLEHSWKALVCDGDTVSVHR |
| | | 1 | | | | PGFYTERFOCFMCNTAFKKIPA |
| | i i | 1 | | ľ | | RTLTTPNAGKDVEQOELSSLLM |
| | | l | | ļ | | GMRSGTATVEDSLVVSYKTKH |
| 4663 | 35031 | A | 4704 | 2 | 410 | |
| 4664 | 35032 | A | 4705 | 2 | 728 | |
| 4665 | 35033 | A | 4706 | ī | 1208 | MKMEKVNTSWLLPPSSISVLIR |
| 1005 | 50000 | ľ. | .,,,, | ľ | | RGAGSMVLLLQSQRQYIFEYDS |
| | | l | | l | | SDRLLAVTMPSVARHSMSTHTS |
| | 1 | l | | l | | IGYIRNIYNPPESNASVIFDYSD |
| | | | | l | | DGRILKTSFLGTGROVFYKYGK |
| | | | | ! | | LSKLSEIVYDSTAVTFGYDETT |
| ŀ | | l | | l | | GVLKMVNLOSGGFSCTIRYRKI |
| 1 | 1 | | | l | | GPLVDKOIYRFSEEGMVNARFD |
| ŀ | | | | l | | YTYHDNSFRIASIKPVISETPLPV |
| l | 1 | | | į . | | DLYRYDEISGKVEHF\IITTAEM |
| l | | 1 | | ĺ | | TLSKHFDTHGRIKEVLA/YEMF |
| | | | | l | | RSLMYWMTVQYDSMGRVIKR |
| i | | | | l | | ELKLGPYANTTKYTYDYDGDG |
| | | 1 | | | | OLOSVACNDRPTWRYSYELNG |
| | | | | l | | NLHLLNPGNSVRLMPLRYDLR |
| ŀ | | 1 | | l | | DRITRLGDVQY/KIDDDGYLCQ |
| | | 1 | | | | RGSDIFEYNFNGAPTKTLSQAS |
| | | 1 | | ! | | GILOSLOGLHEVHRNPACSDFA |
| 4666 | 35034 | A | 4707 | 1 | 663 | MMLLLLALLGAGLLGASLLTS |
| 1.000 | | ľ. | | ľ | | WHAPARNKIPRAOKWREEPDL |
| | | | | l | | DPKPILELPLAELAQQLRTEELS |
| | | | | | | LESILCSYLKOALKVHOEVNCL |
| | | 1 | | | | MDFLGECEEELOALKKLKKSE |
| | | | | | | RGLLYGVPMSLKDTYDSMFLE |
| l | | | 1 | | 1. | KPATKDGVIMKVLKAOGAIPFV |
| l | | | 1 | | I | KTNIPLTLLRSLKRASWALNAA |
| | | | | 1 | 1 | TPIYGQMLSPLNLKKTCGGSS/G |
| | 1 | | 1 | | 1 | GDHGGWPHGPGRGEPGAVPCK |
| | | | | L | 1 | ODITION WETTOFORGEFUR VPCK |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nuelcotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for tast amino acid | *=Stop eodon, /=possible nucleotide |
| | sequence | 1 | 09/540,217 | eodon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 4667 | 35035 | A | 4708 | 2 | 624 | SDARLHKDDTDICFSKTLNSCK |
| | | i | | | | VPQIRYASVERLLERLTDLRFLS |
| | | 1 | | I | | IDFLNTFLHTYRIFTTAAVVLGK |
| | | | | l | | LSDIYKRPFTSIPV\RRARKLSLT |
| | | 1 | | l | | SPLNSKIGALDLTTSSSPTTTTQ |
| | 1 | 1 | | I | | SPAASPPPHTGQIPLDLSRGLSS |
| | | | | | | PEQSPGTQPEVSGSSPHSTAQSK |
| | | 1 | | | | IWSLVWKQYWLMAPSHALKT |
| | | 1 | | | | CHAARLARTFVTSSSATKVHCA |
| | | 1 | | | | ISLK |
| 4668 | 35036 | Α | 4709 | 1 | 195 | |
| 4669 | 35037 | Ā | 4710 | 1 | 1845 | MAEAEPGRPGERGGGGAGRAG |
| | | | | | | GRPGGGGGMAEPSGAETRPPIR |
| | | | | 1 | | VTVKTPKDKEEIVICDRASVKE |
| ļ | | | | | | FKEEISRRFKAQQDQLVLILSGK |
| l | | | | | ' | ILKDGDTLNQHGIKDGLTVHLV |
| 1 | | | | | | IKTPQKAQDPAAATASSPSTPDP |
| İ | | | | | | ASAPSTTPASPTTPTQPSTSDSA |
| ł | 1 | | Ì | | | SSDAGSGSRRSSGGGPSPGTGE |
| | 1 | | | | | GSPSATASILSGFGGILGLGSLG |
| | | | | | | LGSANFMELQQQMQRQLMSNP |
| i | | i | | | | EMLLQIMENPLVQDMMSNPDL |
| | I | | | | 1 | MRHMIIAKPQMQQLMERNPEIS |
| l | | | | | | HMLNNPELMRQTMELARNPAV |
| | | | | | | MQEMMRNQDRALSNLESIPGG |
| l | | | | | | YNALRRMYTDIQEPMFSAARE |
| | 1 | | | | | QFGNNPFSSLAGNSDSSSSQPLR |
| l | | | i | | | TENREPLRNP/WSPSPPTSQAPG |
| | 1 | | | | | SGGEGTGGSGTSQP\GSGMFNS |
| 1 | | 1 | | | | PEMQALLQQISENPQLMQNVIS |
| | 1 | | | | | APYMRSMMQTLAQNPDFAAQ |
| l | | | | | 1 | MMVNVPLFAGNPQLQEQLRLQ |
| | | | | | | LPVFLQQMQNPESLSILTNPRA |
| l | | 1 | | | | MQALLQIQQGLQTLQTEAPGL |
| | | 1 | Į | | | VPSLVSFGMSRTPAPSAGSNAG |
| | | | | | | STPEAPTSSPATPATSSPTGASST |
| | | 1 | | | 1 | QQQLMQQMIQLLAGSGNSQVQ |
| | | | | 1 | | TSEVRFQQQLEQLNSMGFINRE |
| | | 1 | | | | ANLQALIATGGDINAAIERLLGS |
| 4670 | 35038 | С | 4711 | 59 | 464 | |
| | | | | | | |

538

| 4671 35 | 5039 | Α | | | |
|---------|------|---|------|------|---|
| | | | 4712 | 1902 | MAEAEPGRPGERGGGAGRAG GRPGGGGGMAEPSGA ETRPPIR TVTKTPKDKEEPIVICDRASVKE FKEEISRIFKAQQDQLVLILSG FKEEISRIFKAQQDQLVLILSG FKEEISRIFKAQQDQLVLILSG FKEEISRIFKAQQDQLVLILSG FKEEISRIFKAQQDQLVLILSG FKEEISRIFKAQQDQLVLILSG FKEEISRIFKAQDQDAGRAG SSDAGSGSRASSGGGPSPGTGE GSPSATASILSGFGGILGLGSLG GSPSATASILSGFGGILGLGSLG GSPSATASILSGFGGILGLGSLG MILLQIMENPLVQDMMSNIPDL MRIIMIJAKPQMQQLMENNESIS MILLQIMENPLVQDMMSNIPDL MRIIMIJAKPQMQQLMENNESIS TMLNIPPIGEPSAARE QFGNNPFSSLAGNSDSSSSQPL TENREPLPNPWSPSSPFTSQAFGS VALERMYTUNPFG INAASLRSGMFNSPEMQALLQQ ISENPQLMQNVISAPYMRSMM QTLAQNPDFAAQMMVNYPLFA GNIPQLGGLRIQLPVLQMQ QLQTLQTEAPGLWPQLUQQQ GLQTLQTEAPGLWPQLUQQQ GLQTLQTEAPGLWPQLYPCMQQ MQLLAGSGNSQVGTPEVEFG MRYSHIFSNRGISPAPQQLMQQ MQLLAGSGNSQVGTPEVEFG MQLLEQUESQUESQUESQUESQUESQUESQUESQUESQUESQUE |
| 4672 35 | | | | 1 | ATGGDINAAIERLLGSOLS |

539

| SEO ID | ISEO ID NO | Met | SEQ ID NO: | Nucleotide | Nucleatide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|--------------|------------|-------------------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 14.00 | 10000 | | | HIH | | Lucia and an analysis of the party of the pa |
| 4673 | 35041 | Α | 4714 | 11111 | 2506 | KKDQRETRNQKGLGFLRDRPQ |
| | | 1 | | | | WVSGKMKQECLQ/HWNAMAI |
| | | | | 1 | | NNHRAVAIFPKRRHGREDGLLS |
| | | 1 | | | | NLPTFGSYAPLRRVSNEFIASAV |
| | 1 | 1 | | | | QRILLERRALPHGNCKLGGLTP |
| | | 1 | | | | QFMNRKNALVLEVLARAIRQE |
| | | 1 | | | | KEIKGIQLGKEEVKLSLFADDM |
| | | 1 | | ŀ | | IVYLENPIVSAQNLLKLISNFSK |
| | į | 1 | | | | VSGYKINVQKSQAFLYTNNRQ |
| | | 1 | | | | TESQIMSELPFTIASKRIKYLGIQ |
| | | 1 | | | | LTRDVKDLFKENYKPLLNEIKE |
| | | 1 | | | | DTNKWKNIPCSWVGRINIVKM |
| | | 1 | | | | AILPKVIYRFNAIPIKLPMTFFTE |
| | | 1 | | | | LEKTTLKFIWNQKRARIAKSILS |
| | | 1 | | | | QKNKAGGITLPDFKLHYKATV |
| ł | | 1 | | | | TKTAWYWFQNTDIDQWNRTEF |
| | | 1 | | 1 | | SEIMPHIYNYLIFDNPEKNKOW |
| | | 1 | | 1 | | GTDFLFNKWCWENWLAICRKL |
| 1 | | 1 | | ļ | | KLDPFLTPYTKIKSRWIKDINVR |
| | | 1 | | l | | PKTIKALEENLGNTIQDIGMGK |
| | | 1 | | | | DFMSETPKAMTTKVKIDKWDL |
| | | 1 | | ŀ | | IKLKSF |
| 4674 | 35042 | A | 4715 | 3 | 372 | SVGVALRPWKRE/RAASERRSS |
| | | 1 | 1., | ľ | | SGGGGGGGGGGGGGSGS |
| | | 1 | | l | | GQ/HAPAAPAGGIEAVNMASAS |
| | | 1 | | | | YHISNLLGVLAAAALAVTOALE |
| | | 1 | | | | \PPSAVAGSFSAPKSPAHRSAGL |
| 1 | | | | | | PIPAEPLSSPLLOPPPP |
| 4675 | 35043 | Α | 4716 | 1 | 1008 | |
| 4676 | 35044 | Α | 4717 | I | 2619 | |
| 4677 | 35045 | Α | 4718 | 449 | 801 | VLLLSSMSRRKCOSLYVDLLM |
| 1 | 1 | 1 | | | | KKETE*SMEKEKLTMHPLSCTH |
| | | | | | | I*PRPQAPEADKQMRR*TEEON |
| | | | | | ŀ | CRMMWOKKEKEHLNAKRSLA |
| | | 1 | | l . | | GSGWRDQPLDGKAPGEDHLPIF |
| | | | | | | SPFOLPIHPI |
| 4678 | 35046 | Α | 4719 | 1 | 1255 | |
| 4679 | 35047 | Α | 4720 | 2 | 843 | CLHGFGYRIRDSELOKIHRAAV |
| | | 1 | | | | KGDAAGVERCLARRSGDLDAL |
| | | 1 | i | | | NK/TAQIAGAOPREEACTVILLE |
| | | 1 | i | 1 | | HGTNPNLKDIYRNTALHYAVY |
| 1 | | 1 | İ | 1 | | SESTSLAEKLHFHGANIEALDK |
| 1 | 1 | | | | | VLSISFLSKILMSSLKTCGRDAE |
| | | 1 | | | | DYTISHHLTKIQQQILERKKKIL |
| 1 | | 1 | | | | KKEKRGKASESEFLNSLGGPTL |
| | | | | | | DKKIRNVEISDESAVSILHELCV |
| 1 | | | | | | |
| | | | | 1 | | DSLPALDDEVLSVATKCVPEKV |
| | | 1 | 1 | | | SEPLCRPSHEKGNRIVNGKGEG |
| | | 1 | | | | SEECLCPAAHRLRCGERLYLPP |
| 4600 | 25040 | ١. | 1701 | one. | 1050 | RLGCERLCLATTPSEK |
| 4680 | 35048 | A | 4721 | 295 | 1050 | |

| SEO ID | ISEO ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|-------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | 1 | 09/540,217 | codon for peptide | of peptide sequence | deletion, :=possible nucleotide insertion) |
| | | ŀ | | sequence | | i |
| 4681 | 35049 | В | 4722 | 306 | 554 | |
| 4682 | 35050 | Α | 4723 | 2 | 7973 | |
| 4683 | 35051 | Λ | 4724 | 2 | 316 | |
| 4684 | 35052 | A | 4725 | 81 | 228 | DPPLCLGLL\LHRASIVQKRIIYF |
| | | Γ. | | | | QDEGSLTKKLCEQGKTLKHSQ |
| İ | | 1 | | | | OMFFK |
| 4685 | 35053 | A | 4726 | 1 | 1043 | MELEWKVNVKVNSQDTNHHG |
| - | | 1 | | 1 | | SLQLARGEAAAVKFGRMSKKO |
| | | 1 | | i | | RDSLYAEVQKHQQRLQEQRQQ |
| | | 1 | | | | QSGEAEALARVYSSSISNGLSN |
| | 1 | 1 | | | | LNNETSGTYANGHVIDLPKSEG |
| | 1 | 1 | | | | YYNVDSGQPSPDQSGLDMT\GI |
| | | 1 | | | | KQIKQEPIYDLTSVPNLFTY\SSF |
| | 1 | 1 | | | | NN/GQLAPGIT/MTEIEIVAAEKF |
| | | 1 | 1 | | | PLIYKOSFLLTVLSFGGGGSVIC |
| | I | i | | | | GPTFAKVSSSRRFIHHGDKIOPS |
| | | 1 | | | | INALGWTFMEETPOIFKCRTNT |
| | İ | 1 | | | 1 | HGKELEHDLPEHSSGOGSTRRK |
| | | 1 | | 1 | | SSCLRRDNNPMLLSGGRFYEKI |
| | l | | ļ | | ł | HNFITGTFDVRKMEHAEGKTSD |
| | | | | 1 | | LVHVGFQAIKMPSSLKQEASNG |
| | | | | | | LIKLEEASGARMKTGHIK |
| 4686 | 35054 | Α | 4727 | 467 | 584 | |
| 4687 | 35055 | Α | 4728 | 1 | 1794 | |
| 4688 | 35056 | Α | 4729 | 110 | 1797 | PSQQEPGSGTSCLRYCWTAQTL |
| | i | 1 | 1 | | | PS VTMKLWVSALLMAWFGVLS |
| | | | | | | CVQAEFFTSIGHMTDLIYAEKE |
| | | | | | | LVQSLKEYILVEEAKLSKIKSW |
| | | | | | | ANKMEALTSKSAADAEGYLAH |
| | | | | | | PVNAYKLVKRLNTDWPALEDL |
| | 1 | | | | | VLQDSAAGFIANLSVQRQFFPT |
| | 1 | | | | | DEDEIGAAKALMRLQDTYRLD |
| | 1 | | [' | | | PGTISRGELPGTKYQAMLSVDD |
| | 1 | | | | | CFGMGRSAYNEGDYYHTVLW |
| | | 1 | | | | MEQVLKQLDAGEEATTTKSQV |
| 1 | | | | | | LDYLSYAVFQLGDLHRALELTR |
| | | 1 | | | | R\LLSLDPSHERAGGN/LCRYFE |
| | | | | | | QLLEEEREKT\LTNQTEA\ELTTF |
| | | | | | | EGIYERPVDYLPERDVYESLCR |
| | 1 | | | | | GEGVKLTPRRQKRLFCRYHHG |
| | 1 | | | | | NRAPQLLIAPFKEEDEWDSPHI |
| 1 | | | | | | VRYYDVMSDEEIERIKEIAKPK |
| l | | 1 | 1 | | | LARATVRDPKTGVLTVASYRV |
| 1 | | | | 1 | | SKSSWLEEDDDPVVARVNRRM |
| | | | | | | QHITGLTVKTAELLQVANYGV |
| | | 1 | | | | GGQYEPHFDFSRNDERDTFKHL |
| | | 1 | 1 | | | GTGNRVATFLNYMSDVEAGGA |
| | | | l | | | TVFPDLGAAIWPKKGTAVFWY |
| | 1 | | l | | | NLLRSGEGDYRTRHAACPVLV |
| | I | - | | l | | GCKWVSNKWFHERGQEFLRPC |
| 4689 | 35057 | В | 4730 | 1 | 2433 | |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 4690 | 35058 | A | 4731 | 425 | 1079 | PMGTSFLYECANFQSVSLGDPQ |
| | | l | | | | EPSCLCGGQPQGAAGGSSGSED |
| | | 1 | | | | ALLCLWDLQARKWKFEMSYTS |
| | | 1 | | | | GNIRGSSFCQFKSSFLVYFKALL |
| | | l | | | | KFRELFAQFKSFMGEKKLSLAP |
| | | | | | | PMSDSSGDGIIRKIDYASCKRSG |
| | | 1 | | i | | \SSIRALPKTYQQP/EVLNDTWV |
| | i | 1 | | ł | | SFPSWSEDSTFVSSKKTPYEEQL |
| | İ | l | | l | | HRCEDERFEEMKTAGFASFGER |
| | | | | | | SKTGVPNLRVTDWYRLVAC |
| 4691 | 35059 | A | 4732 | 3 | 425 | GASSEEAEGASEGP\GAPGGWG |
| | | 1 | | | | APGSOGAOEGGDLOEAEESOE |
| | | | | l | | GGDPRKPRSPRKVERHRKAGA |
| | | ı | | | | PGRDLGRPSLTVLL\NHCVLOR |
| | | ł | | | | LRKIYHSSIKPLEQSYKYNELRQ |
| | | | | | | HEITGORCPCCEEPKPOHOERA |
| | | 1 | | | | LFVVVSENRNI |
| 4692 | 35060 | В | 4733 | I | 1056 | |
| 4693 | 35061 | Α | 4734 | 171 | 511 | LLSVRHVVRNTQETANDVOVW |
| | | 1 | | | | /LDREGGSKI\NTGVCFLDHMLD |
| | 1 | 1 | | | | QIATAVSRME\INVKGDLYIDD |
| | | 1 | | | | HHTV\EDTGL\ALGEALKIAPGD |
| | | 1 | | i | | KPGICRFGFVLP\MDECL\ACAL |
| | | 1 | | | | DISGGPH |
| 4694 | 35062 | Α | 4735 | 563 | 763 | |
| 4695 | 35063 | Α | 4736 | 365 | 1644 | RTSQMSSSAWRQQNRARPSSAI |
| | | l | | l | | LPSSLSLGHPALPQFSQRMPAT |
| | | l | | l | | ASQLPGMVGVLEGYGQTAASP |
| | 1 | | | l | | GSVSSCSPACSSCCLGCWWPSS |
| | | | | | 1 | WPSCRLHPHLGRPIAHCLPE/VL |
| | | | | | | TTTTTTPTITTSQAAGTPKGQQE |
| | | 1 | | | | SGVSPSPQSTCGGLLSGPRGFFS |
| | 1 | 1 | | | | SPNYPDPYPPNTHCVWHIQVAT |
| | į. | l | | | | DHAIQLKIEALSIESVASCLFDR |
| | | | | | | LELSPEPEGPLLRVCGRVPPPTL |
| | ŀ | | | 1 | İ | NTNASHLLVVFVSDSSVEGFGF |
| | 1 | 1 | 1 | l | | HAWYQAMAPGRGSCAHDEFR |
| | | 1 | 1 | l | | CDQLICLLPDSVCDGFANCADG |
| | | 1 | 1 | 1 | | SDETNCSAKFSGCGGNLTGLQG |
| | | 1 | l | l | | TFSTPSYLQQYPHQLLCTWHIS |
| | | | l | l | | VPAGHSIELQFHNFSLEAQDEC |
| | | | 1 | l | | KFDYVEVYETSSSGAFSLLGRF |
| | | 1 | | l | | CGAEPPPHLVSSHHELAVLFRT |
| | | l | | l | | DHGISSGGFSATYLAFNATERL |
| | | | | l | | CLVESTSS |
| 4696 | 35064 | A | 4737 | 1 | 154 | |
| 7070 | 13004 | 1^_ | 7,31 | l <u>'</u> | 137 | |

| SEQ ID NO: | SEQ ID NO: of peptide sequence | Met | SEQ ID NO: in USSN 09/540,217 | Nucleotide location of first codon for peptide sequence | Nucleotide location of last codon for last amino acid of peptide sequence | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
|---------------|--------------------------------------|-----|-------------------------------------|--|---|---|
| 4697 | 35065 | A | 4738 | | 700 | GSRPQFPGHTRVRASGWRPCSL KPQLLGPVHRVSPYLLFLSSSDC AMGLIDGEWQLVLNVWGKVE ADIPCHGQEVURLFKGHPETLE KFDKFKILKSEDEMKASEDLK KHGATVLTALLGGILKKKGHHE AENKPRGTVSNATKHRIPVKVT WRSSPECINGVLQSKHPGDFGA DAQGAMKQGPGSCFRKDNWP PTYKELGLSRAKPLAGFFTPNPS WAPGFKRERGLISV |
| 4698 | 35066 | A | 4739 | 1 | 154 | |
| 4699 | 35067 | A | 4740 | | 617 | GSRPOFPGHTRVRASGWRPGSL, KPOLLGPVHPVSPYLLELSSSDC AMGLIDGEWQLVLNVWGKVE ADIPGHGGEVLIRLFKGHPETLE KFDKFRHLKSEDEMKASEDLK KHGATVLTALGGILKKGHHE AENKPRGTVSNATKHLBPVKVT WRSSPECNIQVLQSKHPGDFIGA DAQGAMNIKALELLFKKDIMAS NYKELGFQG |
| 4700 | 35068 | С | 4741 | 46 | 522 | |
| 4701 | 35069 | A | 4742 | | 617 | TKELLHSKRNCHQSEQATYKM GENFCNLLI*QSANIQNLQRT*T NLQEKNKQPHQK VGGGYEQTL LNRRSLCSQKTHEKLILITGHQR NANQNINEIPSHTS*NGSH*KV RKQQVSYKLL*MRPRRTRQVT Q*RRPPETSLAKETFGNPTNTN AKFKTRGARISHYSSGNGERLP RTVC |
| 4702 | 35070 | В | 4743 | 1 | 6477 | |
| 4703 | 35071 | A | 4744 | I | 623 | MSSDISEVEDKNEFLTEQLSKP QIKFNILKDKFLKTBOTIJRKKS LALETYHNNLSOTOQOIKEMK EMYENAEAKENNSTGKWSCVE ERICOLOHIENPCIEOQLDDVHQ KECLPSKREKFKSEPPAFLSON QVKSSSCSLOTIFPPDDLILYLE NPKDSTKKLLELINKFRVTGYK KILQKSVAFLNDKNEQSKEENQ ECNPIYNNYK |
| 4704 | 35072 | Α | 4745 | 2 | 3272 | |
| 4705 | 35073 | Α | 4746 | 1 | 579 | |
| 4706 | 35074 | Α | 4747 | 3 | 510 | |

| SEO ID | SEO ID NO: | Mct | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | 1 | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | l | | sequence | | |
| 4707 | 35075 | A | 4748 | li . | 1261 | MEAVDTFLVFNALNFLLTSOTT |
| | | | | ľ | | GCSSSCDPGHGLGQGSGNRFPI |
| 1 | | | | | | AAASARTAEEAKWFFSNKDYS |
| | | l | | | | NVLQLPDPKKTEYHIHEKRFSD |
| | | | | 1 | | SRILCYYPEFGKVEEIILTAMKH |
| | | | | | | DWFGKHRKDDKIEKTGKIKIOE |
| | l . | 1 | | | | SFTSEEERIRMKQEQERIQAKTR |
| | | 1 | | | | EFRE\ROARERDYAEIQDFHRTF |
| | | | | | | GCDDELMYGGVSSYEGSMALN |
| l | | | | } | | ARPQSPREGHMMDA\LYAQVK |
| | | 1 | | | | KPRNSKPSPVDSKGKVLGEADP |
| | l. | 1 | | | | VYPRRNPGTEGNASSLPSVSFSE |
| | | | | 1 | | SPPVRAAFAGYHYVAFPWLOK |
| | | | | 1 | | LMSGTSGKDPEKEADLARVVT |
| | ŀ | | | ŀ | ŀ | LRVVTLRIETHVKTLAFTAALL |
| l | ŀ | 1 | | | | OOLACIDVGMDKONDVYTYN |
| ł | - | 1 | | ł | | KILLSFKRKEILTHTTTRMSLED |
| 1 | | | | | | IILSEINQWQEDKYRFGLYEVA |
| l | l | | | | | OVVKLIETESKVVVSRDGGRG |
| 4708 | 35076 | Α | 4749 | 10 | 2051 | QTTREEZIESKTTTSREGGRO |
| 4709 | 35077 | A | 4750 | 2 | 2118 | |
| 4710 | 35078 | A | 4751 | 1 | 658 | MWNSKTLAAFRPCPKDPLNFE |
| | 155070 | ' | | ľ | | LERDNLAYLAEEIPKQQSIQYIT |
| l | I | l | | | | WMILKAFSHMHLORDNLKLEL |
| 1 | l | 1 | | l | | MFKRKAKHKGLKNLHPDHVIE |
| 1 | İ | 1 | | | i | KKNLFSAEKFKPAAEIYISNEEP |
| l | | 1 | | | | NVNSQDNGKKCLOGMSEIFAA |
| | | | | | | APAITDNTSDKTTLIKVSSWPYI |
| | l | 1 | | | | ADRRCPLVNVTREDSPSEDPVF |
| | | 1 | | | | LRTLGKGDWFGEKALOGWGL\ |
| | | | | | | KGIHHVSAQEPVCLLLPFMTPR |
| 4711 | 35079 | В | 4752 | 1 | 471 | |
| 4712 | 35080 | A | 4753 | 315 | 407 | |
| 4713 | 35081 | Α | 4754 | 41I | 1042 | |
| 4714 | 35082 | Α | 4755 | Ι. | 423 | |
| 4715 | 35083 | С | 4756 | 202 | 321 | |
| 4716 | 35084 | Α | 4757 | 5 | 413 | CFFFFFFETESHFVTQAGVQWR |
| | 1 | 1 | | | | DLGSLQSPPPGFTPFS/SPQPPKE |
| l | 1 | 1 | | | | PGPQAPATTPGQSFAFLVEMGF |
| | 1 | | | 1 | | HHVSQ\EVSIS*PRDPPASASQS |
| l | | | | 1 | | AGTTGVSHRAWTFCFLRQSLA |
| ĺ | 1 | | l | l | | LSPDWSAVARSQLTATSASWV |
| | | | | | | QVSRR |
| 4717 | 35085 | C | 4758 | 150 | 491 | |
| | | | | | | |

| SEQ ID NO: | SEQ ID NO: of peptide sequence | Met hod | SEQ ID NO: in USSN 09/540,217 | Nucleotide location of first codon for peptide sequence | Nucleotide location of last codon for last amino acid of peptide sequence | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
|---------------|--------------------------------------|------------|-------------------------------------|--|---|--|
| 4718 | 35086 | A | 4759 | | 548 | GIAFCLNLIKTLKLPNFKSCVIL LGLLLLYDV/FFVFITFNGE SIMVELAAGPFGNNEKNDGNL VEATGQPSAPHEKLPVVIRVPK LIYFSVMSVCLMPVSILGFGDII VPGLLIAYCRRFDVQTGSSYIY |
| - | | | ļ | | | YVSSTVAYAIGMILTFVVLVLM |
| 4719 | 35087 | В | 4760 | 642 | 1985 | KKGQPALLYLVPCTLITASVVA |
| 4720 | 35088 | A | 4761 | 39 | 252 | |
| 4721 | 35089 | A | 4762 | 1 | 783 | |
| 4722 | 35090 | c | 4763 | 218 | 358 | |
| 4723 | 3509I | В | 4764 | 372 | 374 | |
| 4724 | 35092 | В | 4765 | 129 | 1036 | |
| 4726 | 35093 | A | 4767 | 1211 1 | 603 | SQSCILIQEDFAPIAGEQEAEQ HQEDI ARILARSILQGCSRQP GTRLHGSAPWPGEAQNRSRPLP GDSSPLDRYRGI/SDAVGKSRSG DIGSSLRVEAGDKRTQASPERQ PHCGAHDAQDISGGREIFKPRQ HCGAHWSIKVGHGSGFPGKR PRGAGLSGRGGRGRSKLKSGIG AVVLPGVSTADISSNKDDENS VLDMVVLFSSSDKFTLNQVCG SFGQGAEGRLLACSQCGQCYH PVCVSIKMDACSSSELKY MANFNDCVLDKEKVCIAAKFID HAPAGEFBEVFSDIRLLCNFIDS LLRERAARAFAHYNMDQFTPV KMEGCEDQTIIACIESHEQPKR KDVQDSLTVSDAQTAGEFIKII ENAENEYQTAISENCQTMSDTT FKVLRRQLPYTRTKIDWNKILS YNI |
| 4727 | 35095 | A | 4768 | | 867 | MADFDDRVSDEEKVRIAAKFIT HAPPGEFNEVFNDVRLLINND NLLREGAAHAFAQYNMDOPH AVKUEGYEDOVLITEHGOLIGN SRVLDPRNKISNEFDHLRKEAS DPQPEEADGGI.KSWRESCDSA LRAYVKDHYSNGFCTYYAKTI DGQOTIIACIESHOFJOPKNFWN GRIWRSEWKVPITPPSAQIVVG VLKIQVHYYEDGNVQLVSHKD VQDSI.TVSNEAQTIAKEFIKIIE NAENEYQTAICGNYQTMSDTT FKALRRQLPVTRTKIDWNKILS YKIGKEMQNA |

| SEO ID | SEQ ID NO: | Met | SEQ ID NO: | Nuclcotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|---|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | l | 09/540,217 | codon for peptide | of peptide sequence | deletion, \-possible nucleotide insertion) |
| | | | | sequence | | |
| 4728 | 35096 | Α | 4769 | 2 | 690 | WPSGSASRPRHLRAPEPV\GKA |
| | 1 | l | | | | GKNKGAGLTPA/AGTSGCAGR |
| | | 1 | | | | AESRGPPTGSHGSEPSRGSKGL |
| 1 | 1 | 1 | | | | CGRGTRSLPERGAEVLPHLPAO |
| | i | 1 | | | | TSPQLGSQGAWP/RHPRKPFRP |
| | | 1 | | | | AARAGTOPPGFVPSTPALLKVL |
| | | 1 | | | | YRSAHTQHSGRAAPEPSRLALG |
| | | l | | | | PTLQQKRHMGHRRNLTFSSTY |
| | | l | İ | | | NKKCGFGWAVEMRFSALLDVT |
| | | 1 | | | | TTPSRVAFWGSRGPPLGMERQL |
| | | 1 | | | | QLLSGYSPDGWLSTSM |
| 4729 | 35097 | A | 4770 | 1 | 590 | MDTRIGTTDTGTYGKVEGARR |
| | | 1 | | | | MRLKKLPIEYYAYYLDDEIICTS |
| 1 | l l | | | | | NPCEFPGYGIEREYPCETSGPLE |
| 1 | | | | | | LTVQEDQGEEPQREELTRKKTS |
| | | | 1 | 1 | | KVCRGSPLAWATGVKPCLKKK |
| | | 1 | | | | RRRRKEERRKKKEEGEGEGEE |
| | | | | | | EEEEEEEEEEEEEE |
| | | 1 | | | | EE/EEEEEEEEEEEEE |
| | | | | | | EEEEESDPCTSWNTSQP |
| 4730 | 35098 | Α | 4771 | I | 288 | |
| 4731 | 35099 | Α | 4772 | I | 237 | MRSSVIGPRSHIPSQRKSGIQEE |
| | | ł | | | | EEEEEQEEEEEEEE/EEEEEE |
| | 1 | | | | | EEEEEEEKGLLDQEAARHLV |
| · | | | | | | LPAATQCKPKM |
| 4732 | 35100 | Α | 4773 | I | 794 | MASHSSPMGSQYYYGFPGPDS |
| | 1 | | | | | AMHALNTVVSEKDLTLDLSGL |
| | | | | | | VARNKRCGPHSYSLNTHLLHA |
| | | | | | | CLRLPTQRENTTLKTFIPQGWEI |
| | Į. | | | | | HTDQVEREAECQPGRLKICVHD |
| | 1 | | | | | TAQELPLASTARNALLGRNLCP |
| | | | | | | FRQSSTTQMPDEIPISLDDRMRP |
| | į. | | | 1 | | PSLKKKK/VVGEEEEEEEEKEK EEEEEE/DEGEEEEEEEEEE |
| | 1 | | | | | |
| | | | | | | EEEEEEEEEGGGGGVGEEEEE EEGEGEGGGGEEDEEE*EEEEE |
| | l | | | | | EQKKKEKKKKEQEEGGGEGG |
| 4733 | 35101 | A | 4774 | 115 | 341 | EQARRERARREQEEGGGEGG |
| 4734 | 35101 | A | 4775 | 1 | 651 | |
| 4735 | 35102 | A | 4776 | 189 | 618 | SLCHKEAEGGHGKAHVEGKRA |
| 1 | 100.00 | ľ | 1 | 1 | I | PSNLOPSAPAELSGNNSISF\HHE |
| 1 | | 1 | | | 1 | EEEEEEEEEEEEEEEEEE |
| | | l | | | | EEEEEEEEEEEEEDLLYNFI |
| | | | | | | YIIFSKMPTKVPSLWDSKLGAE |
| | | 1 | | | | OAAPEENNKKEOOEEYOGKSF |
| | 1 | 1 | | | | SFLINLTECWP |
| 4736 | 35104 | A | 4777 | 1 | 414 | |
| | 1 | 1 | | 1. | 1 | |

| SEQ ID | | | SEQ ID NO: | | | Amino acid sequence (X=Unknown, |
|--------|------------|----------------|------------|-------------------------------|---------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \-possible nucleotide insertion) |
| | | | | sequence | | |
| 4737 | 35105 | Α | 4778 | 189 | 692 | SLCHKEAEGGHGKAHVEGKRA |
| | | 1 | | i | | PSNLQPSAPAELSGNNSISF\HHE |
| | | | | | | EEEEEEEEEEEEEEEE |
| | | | | | | EEEEEEEEEEEEEELLLYNF |
| | | l | | | | IYIIFSKMPTKAMSISSMFKFAT |
| | | | | | | KIRMTVTPNPKCCWIPVFPAYL |
| | | | | | | STSKAAKCMHHTAHHGQEKSD |
| | | | | | | HCISPSPIPAP |
| 4738 | 35106 | Α | 4779 | 2 | 3815 | |
| 4739 | 35107 | Α | 4780 | 957 | 1493 | KNRNYNKLSLRPQCNPTRTQD* |
| | | l | | | | ETHSKPLNYMETEQPSPE*LLG |
| 1 | | 1 | | | İ | T*RNEGRHKAVL*NQ*EKRHNI |
| | | 1 | l | | | PESLGHI/AKQCVEGNL*H*MPT |
| | 1 | | 1 | i | | RESRKDLKLTP*/PSQLKELEKQ |
| | | l | | l | | EQTHSKAGRRQE/TN*DQSRIEG |
| | 1 | 1 | | | | DRDTKNPSKNQ*IQELVF*KDQ |
| | | ı | | | | QN**TASKTNKEEKREESNRRN |
| | | | | | | ккс |
| 4740 | 35108 | Α | 4781 | 1 | 4962 | |
| 4741 | 35109 | Α | 4782 | 2421 | 3011 | NQACQPGQAGAARAGQCFPRV |
| | | l | | | | AQRPGPGPAGMALAHPDLYLC |
| | | 1 | | i | | HSAGDQCR*DEEADPPEGQAPT |
| | | l | | .0. | | HFQVHPAGGLHLLDRLAAPQH |
| | | ı | | | | QAGTQGQGQPGRHH*PAARSS |
| | 1 | | | | | PVEPPSTGSPSRPTTTMWPSCSR |
| | | 1 | İ | | | RQGGLGPGL*CVQQPHLLDAP |
| 1 | 1 | İ | | | 1 | GTLPVLGALVCRLQPWRCLPL |
| | 1 | | | | 1 | GGGGGVGGSQRPPGGGGGNG |
| | | ļ | | | | GRNWG |
| 4742 | 35110 | Α | 4783 | 1 | 932 | MRTPKSSIKPSLGEEKENYRGS |
| 1 | 1 | | | | | LKETAPSLQKEWAEQSSKSQET |
| | | | | | | VGVKGITRHFQVSTLLERREDR |
| | 1 | 1 | İ | | | KSKEPPLLIPRQTVSGVDLQQTP |
| | | | | | | TDLQLSVLTVRRKTNKQKGHP |
| | | | | | | HQKPICTSPSSNTKVKNLEKQL |
| | | 1 | | | l | DEWLTRITNAEKSSKDRMELKT |
| | | | | | | KARELHDECTSLSSRCDQLEER |
| | 1 | | | | | VSVTEDEMNEMKRGEKFREKR |
| | | | | | ł | IKRNEQSLQEIWDYVKRPNLCL |
| | | l | 1 | | | IGVPESDGENGTKLENTLQDIIQ |
| | 1 | 1 | | I | | ENFPNLARQANIQIQEI/RENAT |
| | 1 | 1 | 1 | l | | KILLEKSNSKTHNCQIHQS*NEG |
| 1012 | 25111 | ١. | 4504 | 477 | (20 | KNVKGSQRERSGYPQREAHQT |
| 4743 | 35111 | A | 4784 | 477 | 638 | LLCCGFELPLLARRSLIV*SLLLS |
| | | 1 | l | I | | THQSHSPSSFVPLLVRSCIPLEEE |
| 4744 | 25112 | В | 1705 | 1 | 1509 | RRSDF |
| 4744 | 35112 | l _B | 4785 | <u></u> | 1309 | |

| detetion, wpossible nucleotide insertions arquence and action of peptide sequence and action of the sequence ar | SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--|--------|------------|-----|------------|------------|-----------------------------|--|
| 1745 35113 A 4786 3 832 ERHHPPPQAGPHPPRRRKERN HRQPTPQHGA/WKISVQTTN KGISSSITSTQRNQPQATTVEK, HHSTRTPEEPKGAVRGTR*KK KKTSRDTPPOTP-FKSSSATRN, AGGKDSDKRERKATEDQTTPS KRRKLHPMAKKLKTLKKN*M G**LE*PMQRSP*FR*W*S*PRH NYMNAQASVTDAINWKGP PPPTTNDAKVTPRTIPTCSHH RPPRKPPRTHPTPTPTQNKISQ* NGYTPPRGKRVREDRCKPPQA TSAPRAAKQRQS TSAPRAAKQRQS DSSKQEGDNNMIVVSRNAVRS VKAEPQGDNLENWESCSEAII QGRDNGVPHKAHGLGTEEGG VLKISEQNWLDLVOPILLGGE LPHENKPSRKTLHTCLELLRX CMGDRPVQFELLSOQSVNFGFF KLTINKDHITKNPSVRHHHQR KVDETIKMGKTQSKETRNSKN QSTSPPKERSSPAIEQSWMED DFDELKEEGFRRSNYSELKEEV RTINGKEVKNLEKKLDKWITRI NAEKSLKDIMELKTIAQELING CTSLSNCCODCERRYSVMEDQ MNEMKREEKFREKRIKRNEQS LQEIWDYVKRPNLCLIGVPESS GENGTKLENTLQDIIQVNFPNL ARQANIQIGEIGEMPQRYSILER ETPRHIIVRFTKVEMKEKMLRX AREKGLECSGAGLAHCKL WILL GFSDPPDCSSVSPPLXVH-LUP. SLPHSVGTFFLGSSVSIPPSVPFFI DRVFIIPPYPTIVCDLKITCHT SHGSWMAETAVINHKKRKNSP RIVGSNDTEAYSILSROQKRN LVLFVDQIRKSDGTLGHDIICUT SHGSWMAETAVINHKKRKNSP RIVGSNDTEAYSILSROQKRN LVLFVDQIRKSDGTLGHDIICUT SHGSWMAETAVINHKKRKNSP RIVGSNDTEAYSILSROQKRN LVLFVDQIRKSDGTLGHDIICUT SHGSWMAETAVINHKKRKNSP RIVGSNDTLEAAYSILSROQKRN LVLFVDQIRKSDGTLGHDIICUT SHGSWMAETAVINHKKRNSP RIVGSNDTLEAAYSILSROQKRN LVLFVDQIRKSDGTLGEHDIICUT SHGSWMAETAVINHKKRNSP RIVGSNDTLEAAYSILSROQKRN LVLFVDQIRKSDGTLGEHDIICUT SHGSWMAETAVINHKKRNSP RIVGSNDTLEAAYSILSROQKRN LVLFVDQIRKSDGTLGEHDIICUT SHGSWMAETAVINHKKRNSP RIVGSNDTLEAAYSILSROQKRN LVLFVDQIRKSDGTLGEHDIICUT SHGSWMAETAVINHKKRNSP RIVGSNDTLEAAYSILSROQKRN LVLFVDQIRKSDGTLGEHDIICUT SHGSWMAETAVINHKKRRNSP RIVGSNDTLEAAYSILSROQKRN LVLFVDQIRKSDGTLGEHDIICUT SHGSWMAETAVINHKKRRNSP RIVGSNDTLEAAYSILSROQKRN LVLFVDQIRKSDGTLGEHDIICUT SHGSWMAETAVINHKKRRNSP RIVGSNDTLEAAYSILSROQKRN LVLFVDQIRKSDGTLGEHDIICUT SHGSWMAETAVINHKKRNSP RIVGSNDTLEAAYSILSROQKRN LVLFVDQIRKSDGTLGEHDIICUT SHGSWMAETAVINHKKRNSP RIVGSNDTLEAAYSILSROQKRN LVLFVDQIRKSDGTLEATATATATATATATATATATATATATATATATATATA | NO: | | hod | | | | *=Stop codon, /=possible nucleotide |
| 4745 35113 A 4786 3 832 ERHHPPPQAGPHPPRRKENT HRQPTPQPHGA/WKISVPQTTN KGISSSITSTQRNQPQATTVEK. HHESTRTPEEPKGAVRGTR*K KKTSRDTPPOTP*EKSSSATRN AGGKDSDKEREKATEDQTTPS*KRRKLHPMAKKLKTLKKN*M G*LE*PMQRSP*RT*WS*KPRH NYYMNAQASVTDANWKKGP PPPTTNDAKIVTRTHEPTCSHH RPPRKPRTHPTPTPTQNKISQ*NGYTPPRGKRVREDRCKPPQA TSAPRAAKQRQS 4746 35114 B 4787 1580 4673 4747 35115 A 4788 I 462 MKLEHQEAQRRSGQGREKRR WPEGKAGPCGEAWILCPESQ DDSKQEGDNINIVVSRNAVRS VKAEPQDNIENWESCSEAIV QGRMOVPHKAHGLGTEEEGI VLKISERQNWLDLVDFILLGG LFHENKPSKRT-HTCLELLRX*CMGGRPVQFELISDQSVNFGFF KLTNKDHTKNTCLELLRX*CMGGRPVQFELISDQSVNFGFF KLTNKDHTKNPSVRHHQR KVDETIKMGKTQSRKTNNSKN QSTSPPPKERSSSPAIEQSWMED DFDELKEEGFRSRNYSELKEE*E RTNGKEVKNLEKKLDKWITRI NAEKSLADMELRITAQELBLAD*CTSLSNQCDQLEERVSVMEDQ MNEMKREEKFRERIKREQS LQEIWDYVKRPNLCLIGVPESD. GENGTKLENTLQDIIQVNFPNL ARQANIQIQEIQRMPQRYSLRE ETPRHIVRFTKVEMKEKMLRT AREGLECGSGGLARICKLWLI GFSDPPDCSSVSPLICKLWLI GFSDPPDCSSVSPROYRENT SHERVENDE GFT. SVSIPPSVPRPI DRVFIPPYPTIVCODLKTCHT SHGSWMAETAVINHKKRKNSP RVQSNDLTEAAYSLSRDQKR LVLFVDQIKKSDGTLQEHDDIC LVLFVDQIKKSDGTLQEHDDIC LVLFVDQIKKSDGTLQEHDDIC LVLFVDQIKKSDGTLQEHDDIC LVLFVDQIKKSDGTLQEHDDIC LVLFVDQIKKSDGTLQEHDDIC LVLFVDQIKKSDGTLQEHDDIC LVLFVDQIKKSDGTLQEHDDIC LVLFVDQIKKSDGTLQEHDDIC LVLFVDQIKKSDGTLQEHDDIC LVLFVDQIKKSDGTLQEHDDIC LVLFVDQIKKSDGTLQEHDDIC LVLFVDQIKSDGTLGEHDDIC LVLFVDQIKKSDGTLQEHDDIC LVLFVDQIKKSDGTLQEHDDIC LVLFVDQIKSDGTLQEHDDIC LVLFVDQIKKSDGTLQEHDDIC LVLFVDQIKSDGTLQEHDDIC LVLFVDQIKKSDGTLQEHDDIC LVLFVDQIKKSDGTLQEHDDIC LVLFVDQIKKSDGTLQEHD | | sequence | | 09/540,217 | | of peptide sequence | deletion, \=possible nucleotide insertion) |
| HROPTPOPHGA/WKISVPOTTN KGISSSITSTQRNQPQAITVEK, HNESTRTPEEPKGA/WGIT*K, KKTSRDTPPOTP*EKSSSATRN AGGKDSDKEREKATEDQTTPS KRRKLHPMAKKLKTLKKN-M G*LE*PMQRSP*RT*WS*KPRH NYVMNAQASVTDAINWKKOP PRPTTNDAKIVTRTHEPTCSHH RPPRKPRTHPTPTPTQNKISQ* NGYTPPRGKRVREDRCKPPQA TSAPRAAKQRQS 4746 35114 B 4787 1580 4673 4747 35115 A 4788 I 462 MKLEHQEAQRRSGQGREKRR WPEGKAGPGCEGAWILCPES DDSKQEGDNNIIVVSRNAVRS VKAEFQGDNLENWESCSEAIIV QCRDMGVPHKAHGLGTEEEGT VLKISERQNWLDLVDFILLGGG LFHENKPSKRT-HTCLELLRX* CMGDRPVQFELLSDQSVNFGFF KLTNRKDHTKNPSVRHHOR KVDETIKMGKTQSRKTRNSKN QGTSPPPFERSSSPAIEQSWMED DFDELKEEGFRSNYSELKEEV RTNGKEVKNLEKKLDKWITRI NAEKSLKDLMELKTLAGELRD CTSLSNQCDQLEERVSVMEDQ MNEMKREEKFRERIKRNEGS LQEIMDYVKRPNLCLIGVPESD GENGTKLENTLQDIIQVNFPNL ARQANIQGEIGEMPPGYSLRK ETPRHIVRFTK VEMKEKLMLR AREKGLECGSAGLARICKLWLI GFSDPPDCSSVSPPLEVHLUP SLPHSVGTFPLGSVSIPPSVPRFI DRVFHPPYPTHYCDLKLTGHT SHGSWMAETAVINHKKRNSP RTVQSNDLTEAAYSLSTOCHGHDICU SHGSWMAETAVINHKKRNSP RTVQSNDLTEAAYSLSTOCHGHDICU SHGSWMAETAVINHKKRNSP RTVQSNDLTEAAYSLSTOCHGHDICU SHGSWMAETAVINHKKRNSP RTVQSNDLTEAAYSLSTOCHGHDICU SHGSWMAETAVINHKKRNSP RTVQSNDLTEAAYSLSTOCHGHDICU SHGSWMAETAVINHKKRNSP RTVQSNDLTEAAYSLSTOCHGHDICU SHGSWMAETAVINHKKRNSP RTVQSNDLTEAAYSLSTOCHGHDICU SHGSWMAETAVINHKKRNSP RTVQSNDLTEAAYSLSTOCHGHDICU SHCSRSTOCHGHDICU SHGSWMAETAVINHKKRNSP RTVQSNDLTEAAYSLSTOCHGHDICU SHCSRSTOCHGHDICU SHCSRSTOCHGHDICU SHCSNSTOCHGHDIC | - | | | | sequence | | |
| KGISSSITSTQRNQPQATTVEK, HHESTRIPEEPKGAVRGTR*KI KKTSRDTPPQTP*EKSSSATRN, AGGKDSDKRERKATEDQTTPS KRRKLHPMAKKLTLKKN*M G*Le*PMQRSP*RT*WS*KPRH NYVMNAQASVTDAINWKKGP PPPTTNDAKUTPRTPIPTCIPKISQ* NGYTPPRGKRYREDRCKPPQA TSAPRAAKQRQS 4746 35114 B 4787 1580 4673 4747 35115 A 4788 I 462 MKLEHQEAQRRSGQGREKRR WPGGKAGPGCGGAWILCPESQ DDSKQEGDNNMIVVSRNA VRE VKAEPQGDILENWESCSEAII QGRDNGVPHKAHGLGTEEGG VLKISERQNWLDLVSPILLGGE LFHENKPSRKTLHTCLELLRKY CMGDRPVQFEILSDQSVNFGFF KLTNRKDHTKNPSVRHHOR KVDETIKMGKTQSRKTRNSKN QSTSPPKERSSSPALEGSWMED DFDELKEEGFRRSNYSELKEEV RTNGKEVKNLEKKLDKWITRI NAEKSLADLMELKTIAQELRD CTSLSNCCDQLEERVSYMEDQ MNEMKREEKFREKRERGE LQEIWDYVKRPNLCLIGVPESC GENGTKLENTLQDIIQVNFPNL ARQANIQQEQRMPQRYSLARE ETPRHIVRFTK VEMEKKMLR ARCANIQQEGRMPQRYSLARE ETPRHIVRFTK VEMEKKMLR ARCANIQQETGRMPQRYSLARE ETPRHIVRFTK VEMEKKMLR ARCANIQQETGRMPQRYSLARE ETPRHIVRFTK VEMEKKMLR ARCANIQCTPPLGSVSTSPVLRVLVLUP SLPHSVGTPTPLGSVSTSPVLRVLVLUP SLPHSVGTPTPLGSVSTSPVLRVLVLUP SLPHSVGTPTPLGSVSTSPVLRVLVLUP SLPHSVGTPTPLGSVSTSPVLRVLVLUP SLPHSVGTPTPLGSVSTSPVLRVLVLUP SLPHSVGTPTPLGSVSTSPVLRVLVLUP SLPHSVGTPTPLGSVSTSPVLRVLVLUP SLPHSVGTTPTLGSVSTSPVLRVLVLUP SLPHSVGTTPLGSVSTSPVLRVLVLUP SLPHSVGTTPLGSVSTSPVLRVLVLUP SLPHSVGTTPLGSVSTSPVLRVLVLUP SLPHSVGTTPLGSVSTSPVLRVLVLUP SLPHSVGTTPLGSVSTSPVLRVLVLUP SLPHSVGTTPLGSVSTSPVLRVLVLUP SLPHSVGTTPLGSVSTSPVLRVLVLUP SLPHSVGTTPLGSVSTSPVLRVLUP SLPHSVGTTPLGSVSTSPVLRVLUP SLPHSVGTTPLGSVSTSPVLRVLUP SLPHSVGTTPLGSVSTSPVLRVLUP SLPHSVGTTPLGSVSTSPVLRVLUP SLPHSVGTTPLGSVSTSPVLRVLUP SLPHSVGTTPLGSVSTSPVLRVLUP SLPHSVGTTPLGSVSTSPVLRVLUP SLPHSVGTTPLGSVSTSPVLRVLUP SLPHSVGTTPLGSVSTSPVLRVLUP SLPHSVGTTATATATATATATATATATATATATATATATATATAT | 4745 | 35113 | A | 4786 | 3 | 832 | ERHHPPPOAGPHPPRRRKERNT |
| HNESTRTPEEPKÄAVRGTR*KA KKTSRDTPPQTP*EKSSSATRN AGGKDSDKRERKATEDQTTPS KRRKLHPMAKKLKTLKKN*M G*LE*PMQRSP*R*T*W*KPRH NYMMAQASVTDAINWKKGP PRPTTNDAKIVTRPTTPTQKISGY NGYTPPRGKRVREDRCKPPQA TSAPRAKQRQS 4746 35114 B 4787 1580 4673 4747 35115 A 4788 I 462 MKLEHQEAQRRSGQGREKRR WPEGKAGPGCEGAWILCPESQ DDSKQEGDINNINVSRNAVRS VKAEPGGNLENWESCSEAII VGRDNOVPHKAHGLGTEEEG VLKISERQNWLDL VDFILLGGI LFHENKPSKRT.HTCLELLRKY CMGDRPVQFELLSDQSVNFGFF KLTNRKDHITKNPSVRHHOR KVDETIKMGKTQSRKTRNSKN QSTSPPPKERSSPAIEQSWMEI DFDELKEEGFRSNYSELKEEE RTNGKEVKNLEKKLDKWITRI NAEKSLKDIMELKTLAGELRD CTSLSNOCDOLEERVSVMEID OMNEMKREEKFREKKRIKRNEQS LQEIWDYVKRPNLCLIGVPESS GENGTKLENTLQDIIQVNFPNL ARQANIQIGEIGRAPQRYSLER ETPRHIIVRFTKVEMKEKMLR ARGANIQIGEIGRAPQRYSLER ETPRHIIVRFTKVEMKEKMLR ARGANIQIGEIGRAPQRYSLER ETPRHIIVRFTKVEMKEKMLR ARGANIQIGEIGRAPQRYSLER ETPRHIIVRFTKVEMKEKMLR AREKGLECSGAGLAHCKLWLI GFSDPPDCSSVSPPLKVHLUP SLPHSVGTFFLGSVSIPPSVPRFI DRVFIPPYPTHYCODLKTCHT SHGSWMAETAVINHKKRKNSP RIVQSNDLTEAAYSLSRDQKR | ł | | | | | | HRQPTPQPHGA/WKISVPQTTN |
| KKTSRDTPPOTP*EKSSSATRN AGGKDSDKRERKATEDQTTPS KRRKLHPMAKKLKTLKKN*M G*L*PMQRSP*RT*WS*KPRH NYVMNAQASVTDANN*KAG PPPTTNDAKIVTRFTIPTCSHH RPPRKPRTHPTPTTQNKISQ* NGYTPPRGKRVREDRCKPPQA TSAPRAAKQRQS 4746 35114 B 4787 1580 4673 4747 35115 A 4788 I 462 MKLEHQEAQRRSQGGREKRR VERGKAGPGCGA WILCPESQ DDSKQEGDNNMIVVSRNA VRS VKAEFQGDNLENWESCSEAIN QGRDKOPHKAHGLGTEEEGG VV.KISERQNWLDLVDFILLGGI LFHENKPSRKT-HTCLELLRX* CMGDRPVQFELSDQSVNFGF KLTNKDHTKNPSVRHHQR KVDETIKMGKTQSRKTRNSKN QSTSPPPKERSSSPAIEQSWMED DFDELKEEGFRSRNYSELKEE* RTNGKEVKNLEKKLDSWITRT* NAEKSLK DLMELKTIAQELRD CTSLSNQCDQLEERVSVMEDQ MNEMKREEKFREKRIK RNEQS LQEIMPVVKRPNLCLIGVPESL GENGTKLENTLQDIIQVNFPNL ARQANIQGEIGRAPQRYSLER ETPRHIVRFTKVEMKEKLNEKLLSKELLS LGESDPPDCSSVSYPLEVHLUT, SLPJHSVGTPFLGSVSIPPSVPRFI DRVFIPPYPTIVCDOLKTCHT SHGSWMAETAVINHKKRKNSP RVQSNDLTEAAYSLSRDQKRN LVLFVDQIRKSDGTLGEHDDIC STERSTORDEN LVLFVDQIRKSDGTLGEHDDIC SKRRKENSENDERNE | 1 | 1 | | | | ŀ | KGISSSITSTORNOPOATTVEKA |
| AGGKDSDKRERKATEDQTTPS KRRKLHPMAKKLKTLKKN*M G*LE*PMQKSP*RT*WS*KPRH NYYMNAQASVTDAINWKGP PRPTTNDAKUTPTIPTCSHI RPPRKPPRTHPTPTIQNKISQ* NGYTPPRGKRVREDRCKPPQA TSAPRAAKQROS 4746 35114 B 4787 1580 4673 4747 35115 A 4788 I 462 MKLEHQEAQRRSGQGREKRR WPEGKAGPGCEGAWILCPESQ DDSKQEGDNNIVVSRNAVRS VKAEPQGNULENWESCSEAII QGRDNOYPHKAHGLGTEEGG VLKISERQNWLDLVOFILLGGG LFHENKPSRKTLHTCLELLRKY CMGDRPVQFEILSDQSVNFGFF KLTNRKDHITKNPSVRHHHQR KVDETIKMGKTQSRKTRNSKN QSTSPPMERSSPAIEGSWMED DFDELKEEGFRRSNYSELKEEV RTNGKEVKNLEKKLDKWITRI NAEKSLKDLMELKTIAQELRD CTSLSNCCDQLEERVSVMEDQ MNEMKREEKFREKRKREQS LQEIWDYVKRPNLCLIGVPESE GENGTKLENTLQDIIQVNFPNL ARQANIQICEIGEMPQRYSLER ETPRHIVRFTKVEMKEKMLRX AREKGLECSGAGLAHCKLWLI GFSDPPDCSSVSPPLXHVLUP SLPHSVGTFPLGSVSIPPSVPRFI DRVFIPPYPTHYCODLKTCHT SIGGSWARETAVINHKKRNSP RIVQSNDLTEAAYSLSROQKRN LVLFVDQIRKSDGTLGEHDGIC | | ĺ | | | | | HNESTRTPEEPKGAVRGTR*KK |
| KRRKLHPMAKKLKTLKKN-M G*LE*PMQRSP*RT*WS*KPRH NYVMNAQASYTDAINWKKGP PRPTTNDAKIVTRTHEPTCSHH RPPRRPRPTHTPTPTQNKISQ* NG*VTPPRGKRVREDRCKPPQA TSAPRAAKQRQS 4746 35114 B 4787 1580 4673 4747 35115 A 4788 I 462 MKLEHQEAQRRSGQGREKRR WPEGKAGPGCEGAWILCPESQ DDSKQEGDNNITVSRNAVRS VKAEFQGDNLENWESCSEAIN QGRDMGVPHKAHGLGTEEEGT VLKISERQNWLDLVDFILLGGE LPHENKPSRKT-HTCLELLRXY CMGDRPVQFELLSDQSVNFGFF KLTNRKDHTHXPSVSHHHOR KVDETIKMGKTQSRKTRNSKN QGTSPPFKERSSSPAIEQSWMED DFDELKEEGFRSNYSELKEEV RTNGKEVKNLEKKLDKWITRI NAEKSLK DIMELKTLAGERLAD CTSLSNQCDQLEERVSVMEDQ MNEMKREKFREKRIKRNEGS LQEIWDYVKRPNLCLIGVPESD GENGTKLENTLQDIIQVNFPNL ARQANIQIGEIGRAPQRYSLRE ETPRHIIVEFTK VEMKEKMLR AREKGLECSGAGLAHCKLWLI GPSDPPDCSSVSPPLEVHLUP- SLPHSVGTFPLGSVSIPPSVPRPI DRVFHPPYPTHYCDLKICTUT SHGSWMAETAVINHKKRNSP RIVQSNDLTEAAYSLSTOCKH | 1 | | | | | | KKTSRDTPPQTP*EKSSSATRNK |
| G*LE*PMQRSP*RT*MS*KPEH NYVMNAQASVTDAINWKKGP PRPTTNDAKIVTR/TI-IPTCSHIH RPPRKPPRTHPTTPTOKISQ* NGVTPPRGKRVREDRCKPPQA TSAPRAAKQRQS 4746 35114 B 4787 1580 4673 4747 35115 A 4788 I 462 MKLEHQEAQRRSGQGREKRR WPEGKAGPGCEGAWILCPESQ DDSKGEODNNIHVSTRAN VRS VKAEFQGDILENWESCSEAIN QGRDNGVPHKAHGLGTEEGG VKLISERQNWLDLUPFILLGGE LFHENKPSRKTLHTCLELLRKY CMGDRPVQFEILSDQSVNFGFF KLTNRKDIHTKNPSVRIHHOR KVDETIKMGKTQSRXTRNSKN QSTSPPKERSSSPAIEQSWMEDQ MNEMKREEKFREKRIKRAGE CTSLSNCODQLEERVSVMEDQ MNEMKREEKFREKRIKRAGE LQEIWDYVKRPNLCLIGVPESG GENGTKLENTLQDIIQVNFPNL ARQANIQIQEIQMPQRYSLER ETPRHIIVRFTK VEMEKKMLRI AREKGLECSAG ALHKUL WLI GPSDPPDCSSVSPVLRVHLVLP SLPHSVGTFFLGSVSIPPSVPRFI DRVFIPPYPTHYCODLKTCHI SHGSWMAETAVINHKKRKNSP RIVQSNDLTEAAYSLSRQVKN LVLFVDQIRKSDGTLGEHDGIC LVLFVDQIRKSDGTLGEHDGIC LVLFVDQIRKSDGTLGEHDGIC LVLFVDQIRKSDGTLGEHDGIC LVLFVDQIRKSDGTLGEHDGIC LVLFVDQIRKSDGTLGEHDGIC LVLFVDQIRKSDGTLGEHDGIC LVLFVDQIRKSDGTLGEHDGIC | | | | | | 1 | AGGKDSDKRERKATEDQTTPS |
| NYYMMAQASVTDAINWKGP PRPTTNDAKIVTRPTHPTCSHH RPPKKPPRTHPTPTPTQKISGY NGYTPPRGKRVREDRCKPPQA TSAPPAAKQRQS 4746 35114 B 4787 1580 4673 4747 35115 A 4788 I 462 MKLEHQEAQRRSGQGREKRR WPEGKAGPGCEGAWILCPESQ DDSKQEGDNNIVVSRNAVRS VKAEPQGDNLENWESCSEAII) QGRDNOVPHKAHGLGTEEEG VLKISERQNWLDLVDFILLGGI LPHENKPSKRT.HTCLELLRKY CMGDRPVQFELLSDQSVNFGFF KLTNRKDHITKNPSVRHHHOR KVDETIKMGKTQSRKTRNSKN QSTSPPKERSSPAIEQSWMEI DFDELKEEGFRSNYSELKEEE RTNGKEVKNLEKKLDKWITRI NAEKSLKDIMELKTLAGELRD CTSLSNOCDOLEERVSVMEDO MNEMKREEKFREKRIKRNEQS LQEIWDYVKRPNLCLIGVFESS GENGTKLENTLQDIIQVNFPNL ARQANIQIGEIGRAPQRYSLER ETPRHIIVRFTKVEMKEKMLR ARCANIQIGEIGRAPQRYSLER ETPRHIIVRFTKVEMKEKMLR AREKGLECSGAGLAHCKLWLI GFSDPPDCSSVSPPLKVHLVLP SLPHSVGTFFLGSVSIPPSVPRFI DRVFIPPYPTHYCODLKTCHT SHGSVMAETAVINHKKRNSP RIVQSNDLTEAAYSLSROCKRN LVLFVDQIRKSDGTLGEHDGIC | | | | | | | KRRKLHPMAKKLKTLKKN*MN |
| PRPTTNDAKIVTRPTIHPTCSHH RPPRKPPRTHPTPTTYCSHH RPPRKPPRTHPTPTTYTOKHSQ* NOYTPPRGKRVKEDRCKPYOA TSAPRAAKQRQS 4746 35114 B 4787 1580 4673 4747 35115 A 4788 I 462 MKLEHQEAQRRSQGREKRR WPEGKAGPOCEA WILCPESO DDSKQEGDNNMIVVSRNA VRS VKAEPQGDNLENWESCSEAIN QGRDKOYPHKAHGLGTEEEGF VV.KISERQNWLDLVDFILLGGI LFHENKPSRKT-HTCLELLRKY CMGDRPVQFELSDQSVNFGFF KLTNRKDIHTKNPSVRHHHQR KVDETIKMGKTJGSRKTRNSKN QSTSPPPKERSSSPAIEQSWMED DFDELKEEGFRSRNYSELKEEV RTNGKEVKNLEKKLDSWITER NAEKSLK DLMELKTIAQELRD CTSLSNQCDQLEERVSVMEDD MNEMKREEKFREKRIKREQS LQEIMPVVKRPNLCLIGVPESD GENGTKLENTLQDIIQVNFPNL ARQANIQGEIGRAPPGYSLER ETPRHIVRFTKVEMKEKMLRT AREKGLECSGAGLAHCKL WLI GPSDPPDCSSVSPVILEVHLUP SLPHSVGTPFLGSVSIPPSVPRFI DRVFIPPYPTHVCDOLKTCHT SHGSWMAETAVINHKKRKNSP RIVQSNDLTEAAYSLSROCKR | | ł | | | | | G*LE*PMQRSP*RT*WS*KPRHE |
| RPPRKPPRTHPTPTPTQNKISQ* NGYTPPRGKRVREDRCKPPQA TSAPRAAKQRQS 4746 35114 B 4787 1580 4673 4747 35115 A 4788 I 462 MKLEHQEAQRRSGQGREKRR WPEGKAGPGCEGAWILCPESQ DDSKQEGDNNNIVVSRNAVR VKAEPQGNULGNWESCSEAII) QGRDNGVPHKAHGLGTEEGT VLKISERQNWLDLVOFILLGGG LFHENKPSRKTLHTCLELLRKY CMGDRPVQFEILSDQSVNFGFF KLTNRKDHITKNPSVRHHHQR KVDETIKMGKTOSRKTRNSKN QSTSPPMERGSSPAIEGSWMED DFDELKEEGFRRSNYSELKEEV RTNGKEVKNLEKKLDKWITRI NAEKSLKDLMELKTIAQELRD CTSLSNCCDQLEERVSVMEDQ MNEMKREEFERKIKRNEGS LQEIWDYVKRPNLCLIGVPESC GENGTKLENTLQDIIQVNFPNL ARQANIQIGEIGRMPQRYSLER ETPRHIVRFTKVEMKEKMLRX AREKGLECSGAGLAHCKLWLI GFSDPPDCSSVSPVLRVHLVLP SLPHSVGTTPLGSVSIPPSVPRFI DRVFIPPYPTHYCDLKTCHT SHGSVMAETAVINHKKRKNSP RIVQSNDLTEAAYSLSRQVKR | | | ŀ | | | | NYVMNAQASVTDAINWKKGPP |
| NGYTPPRGKRYREDRÜCKPPQA TSAPRAAKQRQS 4746 35114 B 4787 1580 4673 4747 35115 A 4788 I 462 MKLEHQEAQRRSGQGREKRR WPEGKAGFOCEGAWILCPES DDSKQEGDNNIIVVSRNAVRS VKAEFQGDNLENWESCSEAIN QGRDMGVPHKAHGLGTEEEGI TVLKISERQNWLDLVDFILLGGI LPHEMERSRKTH-HTCLELLRY CMGDRPVQFELLSDQSVNFGFF KLTNRKDHHTKNPSVRHHHOR KVDETIKMGKTQSRKTRNSKN QGTSPPYERSSSPAIEQSWMED DFDELKEEGFRSNYSELKEEV RTNGKEVKNLEKKLDKWHTRI NAEKSLKDLMELKTLAGELRD CTSLSNQCDQLEERVSVMEDQ MNEMKREKFREKRIKRNEGS LQEIWDYVKRPNLCLIGVPESL GENGTKLENTLQDIIQVNFPNL ARQANIQIGEIGEMPYGRYSLEY LARGE TPRHIIVRFTK VEMKEKMLR AREKGLECSAGLAHCKLWLI GPSDPPDCSSVSPLICKHULVP SLPHSVGTFPLGSVSIPPSVPRFI DRVFHPYPTHYCODLKTCHT SHGSWMAETAVINHKKRNSP RIVQSNDLTEAAYSLSROQKRN LVLFVQSNDLTEAAYSLSROQKRN LVLFVQSNDLTEAAYSLSROQKRN | | | | | | | PRPTTNDAKIVTRPTHPTCSHH |
| TSAPRAAKQRQS 4746 35114 B 4787 1580 4673 MKLEHQEAQRRSGQGREKRR WPEGKAGPGCEGAWILCPESQ DDSKQEDNNIHVSRNAVRS VKAEFQGDILENWESCSEAIN QGRDNGVPHKAHGLGTEEGG VLKISERQNWLDLVPFILLGGG LFHENKPSRKTLHTCLELLRKY CMGDRVOFEILSDQSVNFGFF KLTNRKDIHTKNPSVRHHRGR KVDETIKMGKTQSRKTRNSKN QSTSPPMERSSSPAIEQSWMEDQ MNEMKPEEKFREKRIKRAGG CTSLSNCCDQLEERVSVMEDQ MNEMKREEKFREKRIKRAGG LQEIWDYVKRPNLCLIGVPPSL GENGTKLENTLQDILIQVIPPSL ARQANIQIQEIQRMPQRYSLER ARRANIQIQEIQRMPQRYSLER ETPRHIIVRFTKVEMKEKMLER AREKGLECSGALHKLUKLI GPSDPPDCSSVSPVLRVHLVLP SLPHSVGTFFLGSVSIPSVPREF DRVFHPYPYTHYCDLKTCHT SHGSVMAETAVINHKKRKNSP RIVQSNDLTEAAYSLSRQVKN LVLFVDQIRKSDGTLGEHDIC | | | ļ. | | | - | RPPRKPPRTHPTPTPTQNKISQ* |
| 4746 35114 | | | | | | | NGYTPPRGKRVREDRCKPPOAP |
| 4747 35115 A 4788 I 462 MKLEHQEAQRRSGQGEKRR WPEGKAGPGCEGAWILCPESQ DDSKQEGDNNMIVYSRNA VRS VKAEPQGDLENWESCSEAIN QGRDKOYPHKAHGLGTEEEGI VLKISERQWLDLVDFILLGGI LFHENKPSRKT-HTCLELLRX CMGDRPVQFEILSDQSVNFGFF KLTNKKDIHTKNPSVRIHHOR KVDETIKMGKTOSRKTNSKN QSTSPPPKERSSPAIEQSWMEI DFDELKEEGFRSKNYSELKEE RTNGKEVKNLEKLDKWITRI NAEKSLKDLMELKTLAQELRDI CTSLSNQCDQLEERVSVMEDQ MNEMKREEKFREKRIKREQS LQEIMPVYKRPNLCLIGVPESE GENGTKLENTLQDIIQVNFPNL ARQANIQGEIGRAPPGYSLER ETPRHIVFTKVEMKEKMLRT AREKGLECSGAGLAICKL WLI GPSDPPDCSSVSPVILKVHLLVJP SLPHSVGTPFLGSVSIPPSVPRFI DRVFIPPYPTHVCDOLKTCHT SHGSWMAETAVINHKKRKNSP RIVQSNMLTEAAYSLSRDQKRI LVLFVDQIKKSDGTLQEHDGIC STEPPENSTRUCDICTEDET SHGSWMAETAVINHKKRKNSP RIVQSNMLTEAAYSLSRDQKRI LVLFVDQIKKSDGTLQEHDGIC | | | ŀ | ł | | | TSAPRAAKQRQS |
| WPEGKAGPOCEGA WILCPESQ DDSKQEGDNNMIVVSRNA VR VKAEPQGNLENWESCSEAIIV QGRDNGVPHKAHGLGTEEGG VLKISERQWHLDL VOFILLGGG LFHENKPSRKTLHTCLELLRKY CMGDRPVQFELLSDQSVNFGFF KLTNRKDHITKNPSVRHHHOR KVDETIKMGKTOSRKTRNSKN QSTSPPKERSSSPALEGSWMED DFDELKEEGFRRSNYSELKEEV RTNGKEVKNLEKKLDKWITRI NAEKSLKDLMELKTIAQELRD CTSLSNCCDOLEERVSVMEDQ MNEMKREEFFERIKRNEQS LQEIWDYVKRPNLCLIGVPESC GENGTKLENTLQDIIQVNFPNL ARQANIQIQEIGRMPQRYSLRR ETPRHIVRFTKVEMKEKMLRX AREKGLECSGAGLAHCKLWLI GFSDPFDCSSVSPVLRVHLVLP SLPHSVGTFPLGSVSIPPSVPRFI DRVFILPPYTHYCDOLKTCHT SHGSWMAETAVINHKKRNSP RIVQSNDLTEAAYSLSRQVKR | 4746 | 35114 | В | 4787 | 1580 | 4673 | |
| DDSKQEGDNNMIVVSRNAVR VKAEFQGDNLENWESCSEAIN QGRDNGVPHKAHGLGTEEEGI VLKISERQNWLDLVDFILLGGI LPHENKPSKRT-HTCLELLRKY CMGDRPVOFELISDQSVNFGFF KLTNKDHITKNPSVRHHHOR KYDETIKMGKTQSRKTRNSKN QGTSPPFKERSSPAIEQSWMED DFDELKEEGFRSNYSELKEEV RTNGKEVKNLEKKLDKWITKI NAEKSLKDLMELKTLAGELRD CTSLSNQCDQLEERVSVMEDQ MNEMKREEKFREKRIKREQS LQEIMDYVKRPNLCLIGVPESL GENGTKLENTLQDIIQVNFPNL ARQANIQGIGIGNPORYSLRE ETPRHIIVRFTKVEMKEKMLRT AREKGLECSAGGLAICKLWLI GPSDPPDCSSVSPVLKYHLLVP SLPHSVGTFPLGSVSIPPSVPRFI DRVFHPYPTHYCDNLKTGTT SHGSWMAETAVINHKKRNSP RIVQSNDLTEAAYSLSROQKRN LVLFVDQIRKSDGTLGEHDDII LVLFVDQIRKSDGTLGEHDDII LVLFVDQIRKSDGTLGEHDDII LVLFVDQIRKSDGTLGEHDDII LVLFVDQIRKSDGTLGEHDDII LVLFVDQIRKSDGTLGEHDDII LVLFVDQIRKSDGTLGEHDDII LVLFVDQIRKSDGTLGEHDDII LVLFVDQIRKSDGTLGEHDDII LVLFVDQIRKSDGTLGEHDDII LVLFVDQIRKSDGTLGEHDDII LVLFVDQIRKSDGTLGEHDDIIC LVLFVDQIRKSDGTLGEHDDIIC LVLFVDQIRKSDGTLGEHDDIIC LVLFVDQIRKSDGTLGEHDDIIC LVLFVDQIRKSDGTLGEHDDIIC LVLFVDQIRKSDGTLGEHDDIIC LVLFVDQIRKSDGTLGEHDDIIC LVLFVDQIRKSDGTLGEHDDIIC LVLFVDQIRKSDGTLGEHDDIIC LVLFVDQIRKSDGTLGEHDDIIC LVLFVDQIRKSDGTLGEHDDIIC LVLFVDQIRKSDGTLGEHDDIIC LVLFVDQIRKSDGTLGEHDDIIC LVLFVDQIRKSDGTLGEHDDIIC LVLFVDQIRKSDGTLGEHDDIIC LVLFVDQIRKSDGTLGEHDDIIC LVLFVDQIRKSDGTLGEHDDIIC | 4747 | 35115 | Α | 4788 | 1 | 462 | MKLEHQEAQRRSGQGREKRR |
| VKAEFQGDNLENWESCSEAIN QGRDNGVPHKAHGLGTEEGGT VLKISERQNWLDLVDFILLGGG LFHENKPSRKTLHTCLELLRKY CMGDRVOFELLSDQSVNCFGF KLTNRKDIHTKNPSVRHHHQR KVDETIKMGKTQSRKTRNSKN QSTSPPPKERSSPAIEQSWMED DFDELKEEGFRRSNYSELKEEV RTNGKEVKNLEKKLDKWITRI NAEKSLKDLMELKTIAGELRDI CTSLSNQCDQLEERVSVMEDQ MNEMKREEKFREKIRKEQEL GENGTVLENTLQUIQVNFPL ARQANIQIQEIQRMPQRYSLER ETPRHIVRFTKVEMKEKMLRI AREKGLECSGALAHCKLWLI GPSDPPDCSSVSPVLRVHLVLP, SLPHSVGTFFLGSVSIPSVVRFPI DRVFHPYPYTHYCDLKTCHT SHGSVMAETAVINHKKRKNSP RIVQSNDLTEAAYSLSRQVKN LVLFVDQIRKSDGTLGEHDDIC | 1 | | 1 | | | | WPEGKAGPGCEGAWILCPESQ |
| QGRDMOVPHKAHGLGTEEGT VLKISERQNWLDLVDFILLGGE LFHENKPSRKTLHTCLELLRKY CMGDRPVOFELLSOQSVNFGFF KLTNRKDHITKNPSVRHHHOR KVDETIKMGKTQSRKTRNSKN QSTSPPPKERSSPAIEQSWMEI DFDELKEEGFRSNYSELKEEF RTNGKEVKNLEKKLDKWITRI NAEKSLKDLMELKTLAGELRD CTSLSNOCDOLEERVSVMEDO MNEMKREEKFREKRIK RNEQS LOEIWDYVKRPNLCLIGVFESE GENGTKLENTLODIIQVNFPNL ARQANIQIGEIGRMPQRYSLER ETPRHIVRFTKVEMEKKMLR AREKGLECSGAGLAHCKLWLI GFSDPFDCSSVSPPLRVHLVLP SLPHSVGTFPLGSVSIPPSVPRFI DRVFHPYPTHYCDNLKTGTI SHGSWMAETAVINHKKRNSP RIVQSNDLTEAAYSLSROQKRN LVLFVDQIRKSDGTLGEHDGIC LVLFVDQIRKSDGTLGEHDGIC LVLFVDQIRKSDGTLGEHDGIC LVLFVDQIRKSDGTLGEHDGIC LVLFVDQIRKSDGTLGEHDGIC LVLFVDQIRKSDGTLGEHDGIC LVLFVDQIRKSDGTLGEHDGIC | | | 1 | | | | |
| VILKISERQNWLDLVOFILLGOT LPHENKPSRKTLHTCLELLRKY CMGDRPVOFELLSQSVNFGFF KLTNRKDHTKNPSVRIHHOR KVDETIKMGKTOGSKTRNSKN QSTSPPPKERSSSPAIEQSWMEF DFDELKEEGFRSNYSELKEEV RTNGKEVNLEKKLDKWITRI NAEKSLKDLMELKTIAQELRD CTSLSNQCQLEERVSVMEDQ MNEMKREEKFREKIRNEQS LQEIWDYVKRPNLCLIGVPESD GENGTKLENTLQDIQVNFPNL ARQANIQIQEIQRMPPNL ARQANIQIQEIQRMPPNL ARQANIQIQEIQRMPQRYSLKR ETPRHIWRFTKVEMKEKMLRT AREKGLECSGALINCKLWLI GPSDPPDCSSVSPVLRVHLVLP SLPHSVGTPFLGSVSIPFSVRFFI DRVFHPYPYTHYCDLKTCHT SHGSVMAETAVINHKKRNSP RIVQSNDLTEAAYSLSRDQKRN LVLFVDQIRKSDGTLGEHDIG | ļ | | l l | | | | VKAEFQGDNLENWESCSEAIIV |
| LHENKPSRKTLHTCLELLRKY CMGDRPVQFEILSDQSVNFGFF KLTNKDHITKNPSVRIHHOR KVDETIKMGKTQSRKTRNSKN QSTSPPKERSSSPALEQSWME DFDELKEEGFRSNYSELKEV RTNGKEVNLEKKLDKWITRI NAEKSLKDLMELKTIAQELRD CTSLSNQCDQLEERVSVMEDQ MNEMKREEKFREKRIKNEQS LQEIWDYVKRPNLCLIGVPESL GENGTKLENTLQDIIQVIPPIL ARQANIQIQEIQRMPQRYSLER ETPRHIVRFTKVEMKEKMLR1 ARCALGEOSAG ALHCKLWLI GPSDPPDCSSVSPVLRVHLVLP SLPHSVGTPFLGSVSIPSVPREF DRVFIIPPYTHYCDLKTCHT SHGSVMAETAVINHKKRNSP RIVQSNDLTEAAYSLSRQVKN LVLFVDQIRKSDGTLQEHDIOL | | | 1 | | | | QGRDNGVPHKAHGLGTEEEGT |
| CMGDRPVQFEILSDQSVNFGFE KLTNRKDIHTKNPSVRHHHQR KVDETIKMGKTQSRKTNNSKN QSTSPPPKERSSSPAIEQSWMED DFDELKEEGFRSNYSELKEEV RTNGKEVKNLEKKLDKWITRI NAEKSLKDLMELKTLAGELED CTSLSNQCDQLEERVSVMEDQ MNEMKREEKFREKRIKREQS LQEIMDYVKRPNLCLIGVPESL GENGTKLENTLQDIIQVNFPNL ARQANIQIGEIGRMPQRYSLRE ETPRHIVRFTKVEMKEKMLRI AREKGLECGAGGLAICKLWLI GPSDPPDCSSVSPYLEVHLUPL SLPHSVGTPFLGSVSIPPSVPRFI DRVFIPPYPTHVCDNLKTGIT SHGSWMAETAVINHKKRKNSP RIVQSNDLTEAAYSLSROOKRN | | | | 1 | | | VLKISERQNWLDLVDFILLGGD |
| KLTNRKDIHTKNPSVRIHHOR KVDETIKMGKTQSRKTRNSKN QSTSPPPKERSSSPAIEQSWMEI DFDELKEEGFRSNYSELKEEV RTNGKEVKNLEKKLDKWITRI NAEKSLKDLMELKTIAQELRD CTSLSNOCDQLEERVSVMEDQ MNEMKREEKFREKRIKROEG MNEMKREEKFREKRIKROEG LQEIWDYVKRPNLCLIGVPESD GENGTKLENTLQDIIQVNFPNL ARQANIQIQEIQRMPQRYSLER ETPRHIVRFTKVEMKEKMLR1 AREKGLECSGAGLAHCKLWLI GPSDPPDCSSVSPVLRVHLVLP, SLPHSVGTPFLGSVSIPPSVPRFI DRVFHPYPYTHYCDALKTCHT SHGSVMAETAVINHKKRNSP RIVQSNDLTEAAYSLSRDQKRN LVLFVDQIRKSDGTLQEHDGIC | | | 1 | | | | LFHENKPSRKTLHTCLELLRKY |
| KVDETIKMGKTQSRKTRNSKN QSTSPPPKERSSPAIEQSWMEI DFDELKEEGFRSNYSELKEEV RTNGKEVKNLEKKLDKWITRI NAEKSLKDIMELKTIAQELRD CTSLSNOCDOLEERVSYMEDO MNEMKREEKFREKRIKRNEQS LQEIWDYVKRPNLCLIGVPESE GENGTKLENTLQDIIQVNFPNL ARQANIQIGEIGRAPPQRYSLER ETPRHIIVRFTKVEMKEKMLR1 AREKGLECSGAGLAHCKLWLI GFSDPFDCSSVSPPLRVHLVLP- SLPHSVGTFPLGSVSIPPSVPRFI DRVFIPPYPTHYCDNLKTGIT SHGSWMAETAVINHKKRNSP RIVQSNDLTEAAYSLSROVKR | 1 | | l | | | | CMGDRPVQFEILSDQSVNFGFR |
| QSTSPPPKERSSSPAIEQSWMEI DFDELKEEGFRRSNYSELKEEV RTNGKEVKNLEKKLDKWITET! NAEKSLKDLMELKTLAGELRD CTSLSNQCDOLEERYSVMEDO MNEMKREEKFREKRIKRNEQS LOEIWDYVKRPNLCLIGVPESL GENGTKLENTLOPIIGVNPPSL ARQANIQIQEIQRMPQRYSLRR ETPRHINTRTK VEMKEKMLRT AREKGLECSGAGLANCKLWLL GPSDPPDCSSVSPVLRVHLVLP SLPHSVGTPFLGSVSIPPSVPRFI DRVYFIPYPYTHYCDNLKTCHT SHGSVMAETAVINHKKRNSP RIVQSNDLTEAAYSLSRDQKRN LVLFVDQRKSDGTLGEHDGIC | 1 | | 1 | ŀ | | | |
| DPDELKEEGFRESNYSELKEEV RTNGKEVKNLEKKLDK WITRI NAEKSLADLMELKTIAGELRÖI CTSLSNGCDQLEERVSYMEDQ MNEMKREEKFREKRIKNEGS LQEIWDYVKRPNLCLIGVPESD GENGTKLENTLODIJIOVNFPNL ARQANIQIQEIQRMPQRYSLER ETPRHIVRFTK VEMKEKMLR1 AREKGLECSGAGLHCKL WLL GPSDPPDCSSVSFVLRVHLVLP SLPHSVGTFFLGSVSIPSVVRFT DRVFIPPYTHYCDALKTCHT SHGSVMAETAVINHKKRNSP RIVQSNDLTEAAYSLSRDQKR LVLFVDQIRKSDGTLQEHDGIC | | 1 | | | | | |
| RTNGKEVKNLEKLDKWITER NAEKSLKDLMELKTIAQELRDI CTSLSNQCDQLEERVSVMEDQ MNEMKREEKFREKRIKRNEQS LQEIMDYVKRPNLCLIGVPESC GENGTKLENTLQDIIQVNFPNL ARQANIQIGEIGRMPQNFSLER ETPRHIVRFTKVEMKEKMLRT AREKGLECGAGLAICKLWLI GPSDPPDCSSVSPVLEVHLLVPL SLPHSVGTPPLGSVSIPPSVPRFI DRVFIPPYPTHVCDNLKTCHT SHGSVMAETAVINHKKRKNSP RIVQSNDLTEAAYSLSRDKRN LVLEYDQIRKSDGTLQEHDGIC | 1 | | | | | | |
| NAEKSLKDLMELKTIAQELRDI CTSLSNOCQOLEERVSVMEDQ MNEMKREEKFREKRENGE LOEIWDYVKRPNLCLIGVPESD GENGTKLENTILQDIIQVNFPNL ARQANIQIQEIQRMPQRYSLER ETPRHIVRFTKVEMKEKMLRT AREKGLECSGAGLAHCKLWLI GPSDPPDCSSVSPVLRVHLVLP, SLPHSVGTPFLGSVSIPFSVPRFI DRVFHPYPYTHYCDALKTICHT SHGSVMAETAVINHKKRNSP RIVQSNDLTEAAYSLSROQKRN LVLFVDQIRKSDGTLQEHDGIC | | | 1 | | | | |
| CTSLSNOCDOLEERVSYMEDO MNEMKREEKFREKRIKRNEQS LOEIWDYVKKPNLCLIGVPESS GENGTKLENTLODIIGVNFPNL ARQANIQIGEIGMPORYSLER ETPRHIIVRFTK VEMKEKMLR1 GFSDPPDCSSVSPVLRVHLVLP SLPHSVGTPFLGSVSIPPSVPRFI DRVFHPYPTHYCODLKTGTH SHGSWMAETAVINHKKRNSP RIVQSNDLTEAAYSLSROQKR1 LVLFVDQIRKSDGTLGEHDGIC | | 1 | 1 | | | 1 | |
| MNEMKREKFREKRIK RNEQS LQEIWDYVKRPNLCLIGVPESE GENGTKLENTLQDIIGVNFPNL ARQANIQIGEIQRMPQRYSLRR ETPRHIVRFTKVEMKEKMLRT AREKGLECSGAGLAHCKLWLI GPSDPPDCSSVSPVLRVHLVLP SLPHSVGTPFLGSVSIPPSVPRFI DRVFHPYPYTHYCDNLKTCHT SHGSVMAETAVINHKKRNSP RIVQSNDLTEAAYSLSRDQKRN LVLFVDQRKSDGTLQEHDGIC | 1 | 1 | | | | | |
| LQEIWDYVKRNICLIGVFESE GENGTKLENTLQDIQVNFPNL ARQANIQIQEIQRMPQRYSLER ETPRHIVRFTKVEMEEKMLR1 AREKGLECSGAGLAHCKLWLI GPSDPPDCSSVSPVLRVHLVLP SLPHSVGTFFLGSVSIPSVVRFVH DRVFHPYPYTHYCDVLKTCHT SHGSVMAETAVINHKKRKNSP RIVQSNDLTEAAYSLSRQKRN LVLFVDQIRKSDGTLQEHDGIC | 1 | | i | | | | |
| GENGTKLENTLQDIQVNFPNL ARQANIQIEIQRMPQRYSLRR ETPRHIIVRFTK-VEMKEKMLRI AREKGLECSGAGLAHCKLWLI GPSDPPDCSSVSPVLRVHLVLP SLPHSVCTPFLGSVSIPPSVPRFI DRVFHPYPYTHYCDNLKTCHT SHGSVMAETAVINHKKRKNSP RIVQSNDLTEAA YSLSRDQKRN LVLFVDQIRKSDGTLGEHDGIC | | | | | | | |
| ARQANIQIQEIQRMPQRYSLER ETPRHIVRFTKYEMKEKMLET AREKGLECSAGG.AHCKL.WLI GPSDPPDCSSVSPVLR VHL.VLP SLPHSVGTPFLGSVSIPPSVPRFI DRVFHPYPYTHYCDNLKTCHT SHGSVMAETAVINHKKRNSP RIVQSNDLTEAAYSLSRDQKEN LVLFVDQRKSDGTLQEHDGIC | | | 1 | | | İ | |
| ETPRHINFETKVEMKEKMLR1 AREKGLECSGAGLAHCKLWLI GPSDPPDCSSVSPVLRVHLVLP- SLPHSVGTPFLGSVSIPPSVPRFI DRVFIPPYPTHVCDNLKTGTI SHGSVMAETAVINHKKRKNSP RIVQSNDLTEAAYSLSRQKRN LVLFVDQIRKSDGTLGEHDGIC | | 1 | | | İ | | |
| AREKGLECSGAGLAHCKLWLI GPSDPPDCSSVSPVLRVHLVLP SLPHSVCTPFLGSVSSPSPVSPEI DRVFHPYPYTHYCDNLKTCHT SHGSVMAETAVINHKKRNSP RIVQSNDLTEAAYSLSRDQKRN LVLFVDQIRKSDGTLQEHDGIC | | 1 | 1 | | | | |
| GPSDPPDCSSVSPVLRVHLVLP. SLPHSVGTPFLGSVSIPPSVPRFI DRVFHPYPYTHYCDVLKTGTT SHGSVMAETAVINHKKRKNSP RIVQSNDLTEAAYSLSROWKN LVLFVDQIRKSDGTLQEHDGIC | | | | | | | |
| SLPHSVGTPFLGSVSIPPSVPRFI DRVFHPYPYTHYCDNLKTCHT SHGSVMAETAVINHKKRKNSP RIVQSNOLTEAVJSSRDQKRS LYLFVDQIRKSDGTLQEHDGIC | | | | | | | |
| DRVFHPYPYTHYCDNLKTCHT SHGSVMAETAVINHKKRKNSP RIVQSNDLTEAAYSLSRDQKRN LVLFVDQIRKSDGTLQEHDGIC | | | | | l | | |
| SHGSVMAETAVINHKKRKNSP RIVQSNDLTEAAYSLSRDQKRN LYLFVDQIRKSDGTLQEHDDIC | | | | | | | |
| RIVQSNDLTEAAYSLSRDQKRN LYLFVDQIRKSDGTLQEHDGIC | | | | | | | |
| LYLFVDQIRKSDGTLQEHDGIC | | | | | ĺ | | |
| | l | 1 | | | I | | , , |
| | | 1 | 1 | 1 | l | | |
| | | 1 | 1 | | I | | EIHVAKYAEIFGLTSAEASKDIR |
| | | | | | l | | QALKSFAGKEVVFYRPEEDAG |
| | | 1 | 1 | l | I | | DEKGYESFPWFIKRAHSPSRGL |
| | 1 | | | l | l | | YSVHINPYLIPFFIGLQNRFTQFR |
| LSETKEITNPYAMRLYESLCQY | | | | | L | _ | LSETKEITNPYAMRLYESLCQY |

| SEQ ID | SEQ ID NO: | | SEQ ID NO: | Nucleotide | | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|---------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | coden for last amine acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | ļ | | sequence | | |
| 4748 | 35116 | Α | 4789 | 1314 | 2221 | KNRNYNKLSLRPQCNPTRTQD* |
| | | | | | | ETHSKPLNYMETEQPSPE*LLG |
| | | 1 | | l | | T*RNEGRHKAVL*NQ*EKRHNI |
| | | | | | | PESLGHI/AKQCVEGNL*H*MPT |
| | i | | | | | RESRKDLKLTP*/PSQLKELEKQ |
| | | ĺ | | 1 | | EOTHSKAGRROE/TN*DQSRIEG |
| | | | | | | DRDTKNPSKNQ*IQELVF*KDQ |
| | 1 | | | | | QN**TASKT/IQRRKERRIK*TQ* |
| | | | | | | KMLKEDITTDPTEIKTIIREYYK |
| | | | | | | HLYAHNLENLEEMDKFLDTYT |
| | | | | | | LPRLNOEEAESLNRPITNSEIET |
| | | | | | | VINSLKEKAQDQKDLQLNSTRA |
| | | | | | | LFTIAKAWNOPKCPSMTDEIK/I |
| | | | | | | NVEHIHHGILCSHQKE |
| 4749 | 35117 | A | 4790 | 2 | 2260 | TKDKNHMIISIDGGKAFDKIQQ |
| | | | | | | PFMLKTLNKLGIDGTYLKRIRA |
| | | | 1 | | | FDKPTANIILNGQKLEAFPLKTO |
| | | | | | | TROGCPLSPLLFNIVLEVLARVI |
| | | | | | | ROEKEIKGIOFGKEEVKLSLFA |
| | | | | | | DDMTVYLENPIFSAQNLLKLIS |
| | | | | | | NFSNVSGYKINVQKSQAFLYTN |
| | | | | | | NSQIMSELPFTIATKRITYLGIQL |
| | | | | | | ARDVKDLFKENYKPLLNEIKED |
| | | | | | | TNKWKNIPCSQIGRILWPYCPR |
| | | | | | | OEDENFNSLLQNGDILNSSTEE |
| | | | | | | KFKAHDKKDFNLPEYDLNVEE |
| | | | | | | RLVLIEKSVDSTATADDTHKLD |
| | | | 1 | | | HINMNUNKLITNDTFQPEIMERS |
| | | | i | | | KTQDIVLGTSFLSINSKEETEHL |
| | | | | | | ENGNKYPNLESVNKVNGHSEE |
| | | | 1 | | | TSQSPNRTEPHDSDCSVDLGISK |
| | | | | | | STEDLSPQKSGPVGSVVKSHSIT |
| | | | | 1 | | NMEIGGLKIYDILSDNGPQQPST |
| | | | | | | TVKITSAVDGKNIVRSKSATLL |
| | | | | | | YDQPLQVFTGSSSSSDLISGTKA |
| | | | | | | IFKFDSNHNPEEPNIIRGPTSGPQ |
| | | | | | | SAPQI\YGPPQYNIQYSSSAAVK |
| | | l | | ŀ | | DTLWHSKQNPQIDHASFPPQLL |
| | | l | | | | PRSESTENQSYAKHSANMNFSN |
| | | | | | | HNNVRANTAYHLHQRLGPARH |
| | | | | | | GEMWAISPNDRLIPAVTRSTIQR |
| | | 1 | | | 1 | QSSVSSTASVNLGDPGSTRRAQ |
| | | l | | | 1 | IPEGDYLSYREFHSAGRTPPMM |
| | | 1 | | | 1 | PGSQRPLSARTYSIDGPNASRPQ |
| | | 1 | | l | 1 | SARPSINEIPERTMSVSDFNYSR |
| | | 1 | | l | 1 | TSPSKRPNARVGSEHSLLDPPG |
| 4750 | 35118 | A | 4791 | 1516 | 1729 | ILAPHSLLACRVSAERSAVSPM |
| | | Γ. | | 1 | 1 | GFPLWVTQPFSLAALN/DFFLHF |
| | | | | 1 | 1 | NFG/RI*OLCVLELLFSRSIVVAF |
| | | | | | | |

| SEO ID | SEO ID NO: | Met | SEO ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|--------------|------------|-------------------|-----------------------------|---|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| 1 | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| l | | | | sequence | | |
| | - | | | | | |
| 4751 | 35119 | Α | 4792 | 3 | 1426 | RRYDELQNSSGRDGKPRAMAV |
| | 1 | | | | | TRSTSSTSSGSNSNVLVPVSWK |
| | | 1 | | | | RPQYSQKRAKEKLVHVLSLCG |
| | | 1 | | | į . | QEVGLSKNPSVIFSSCGDLDLLE |
| | | 1 | | | ł | HQTSLVSSEDGAREQENMDDT |
| | | 1 | | | l | NSEQQFRVFRDFDFLDVELEDG |
| | | 1 | | | | EELQGESMDNFNWGVRRRSLD |
| | | 1 | | | | SLDKCDMQILEERQLSGSTPSL |
| | | | | - | | NKMHHEDFDESSEEEDLTASQI |
| | | | | | | LEHSDLIMTLSPSEETNPMELLT |
| ŀ | | i | | | | TACDSTPPEPHSFNTRMSSFDAS |
| 1 | | 1 | 1 | 1 | | LPDMNNLOISEGSKA\EAVREE |
| 1 | l | 1 | | | | EDTTVHEDDLSSSINELPAAFEC |
| | | 1 | | ŀ | | SDSFSLDMTEGEEKGNRALDOF |
| 1 | | | l | l | | TLASFGEGDRGVSPPPSPFFSAI |
| İ | | | | 1 | | LAAFQPAACDDAEEAWRSHIN |
| | | 1 | | 1 | | QLMCDSDGSCAVYTFHVFSSLF |
| | | | | | | KNIQKRFCFLTCDAASYLGDNL |
| | | | | | 1 | |
| | | | | | | RGIGSKFVSSSQMLTSCS\LDKL |
| | | 1 | | | | KFSVLELQEYLDTYNNRKEATL |
| | | | | | | SWLANCKATFAGGSRDGVITC |
| | | _ | | | | QPGDSEEKVIKAC |
| 4752 | 35120 | С | 4793 | 60 | 164 | |
| 4753 | 35121 | В | 4794 | 44 | 2547 | |
| 4754 | 35122 | Α | 4795 | 401 | 9546 | PRADITTCDRRITPGTCSRPLPV |
| | | 1 | | | | LPASLYAADMASQQDSGFFEIS |
| 1 | 1 | 1 | | | | KYLLKSWSNTSPVGNGYIKPPV |
| | | 1 | | | | PPASGTHREKGPPTMLPINVDP |
| | | | | | | DSKPGEYVLKSLFVNFTTQAER |
| | | 1 | | | | KIRIIMAEPLEKPLTKSLQRGED |
| | 1 | | İ | | | PQFDQVISSMSSLSEYCLPSILR1 |
| | | 1 | | | | LFDWYKRQNGIEDESHEYRPRT |
| | 1 | 1 | ŀ | | | SNKSKSDEQQRDYLMERRDLA |
| | | 1 | | | | DFIFSLVLIEVLKQIPLHPVIDSLI |
| İ | | 1 | | | 1 | HDVINLAFKHFKYKEGYLGPNT |
| | | 1 | | | | GNMHI |
| 4755 | | 1 | | | | |
| 4/55 | 35123 | A | 4796 | 2 | 6107 | GERKPKIDLFRTCVAAIPRLLPD |
| 4/55 | 35123 | A | 4796 | 2 | 6107 | GERKPKIDLFRTCVAAIPRLLPD GMSKLELIDLLARLSIHMDDEL |
| 4/55 | 35123 | A | 4796 | 2 | 6107 | GMSKLELIDLLARLSIHMDDEL |
| 4/55 | 35123 | A | 4796 | 2 | 6107 | GMSKLELIDLLARLSIHMDDEL RHIAQNSLQGLLVDFSDWRED |
| 4/55 | 35123 | A | 4796 | 2 | 6107 | GMSKLELIDLLARLSIHMDDEL RHIAQNSLQGLLVDFSDWRED VLFGFTNFLLREVNDMHHTLL |
| 4/55 | 35123 | A | 4796 | 2 | 6107 | GMSKLELIDLLARLSIHMDDEL RHIAQNSLQGLLVDFSDWRED VLFGFTNFLLREVNDMHHTLL DSSLKLLLQLLTQWKLVIQTQG |
| 4/55 | 35123 | A | 4796 | 2 | 6107 | GMSKLELIDLLARLSIHMDDEL RHIAQNSLQGLLVDFSDWRED VLFGFTNFLLREVNDMHHTLL DSSLKLLLQLLTQWKLVIQTQG KVYEQANKIRNSEARDLELDV |
| 4/55 | 35123 | A | 4796 | 2 | 6107 | GMSKLELIDLLARLSIHMDDEL RHIAQNSLQGLLVDFSDWRED VLFGFTNFLLREVNDMHTLD DSSLKLLLQLLTQWKLVIQTQG KVYEQANKIRNSEARDLELDV GVDVDVGVDVDADVDVDVDL |
| 4/55 | 35123 | A | 4796 | 2 | 6107 | GMSKLELIDLLARLSIHMDDEL RHIAQNSLQGLLVDFSDWRED VLFGFTNFLRENVDMHITIL DSSLKLLLQLLTQWKLVIQTQG KVYEQANKIRNSEARDLELDV GVDVDVGVDVDADVDVDL GVDVDVGVDVDADVDVDVD GVDVDVGVDVDADVDVDVD |
| 4/55 | 35123 | A | 4796 | 2 | 6107 | GMSKLELIDLLARLSIHMDDEL RHIAQNSLQGLLVDFSDWRED VLFGFTNFLLREVNDMHHTLL DSSLKLLLQLLTQWKLVIQTOG KVYEQANKIRNSEARDLELDV GVDVDVGVDVDADVDVDVD GVDVDVGVDVDADVDVDVD MGVDVDVGVDVADVDVDVD MGVDVDVGVDRIYGFGCKCGCDR |
| 4/55 | 35123 | A | 4796 | 2 | 6107 | GMSKLELIDLLARLSHMDDEL RHIAONSLQGLLVPFSDWRED VLFGFTNFLLREVNDMHHTLL DSSLKLLLQLLTOWKLVIQTOG KVYEQANKIRNSEARDLELDV GVDVDGVDVDADVDVDVDVD GVDVDGVDVDADVDVDVDVD MGVDVDVDRVIGFGCKCGCDR DVDRVVDVDVDIDVDVDM |
| 4/55 | 35123 | A | 4796 | 2 | 6107 | GMSKLELIDLLARLSIHMDDEL RHIAQNSLQGLLVDFSDWRED VLFGFTNFLLREVNDMHHTLL DSSLKLLLQLLTQWKLVIQTOG KVYEQANKIRNSEARDLELDV GVDVDVGVDVDADVDVDVD GVDVDVGVDVDADVDVDVD MGVDVDVGVDVADVDVDVD MGVDVDVGVDRIYGFGCKCGCDR |

| SEQ ID | SEQ ID NO: | | SEQ ID NO: | | | Amino acid sequence (X=Unknown, |
|--------|------------------------|-----|-----------------------|--|--|---|
| NO: | of peptide sequence | hod | in USSN 09/540,217 | location of first codon for peptide | codon for last amino acid of peptide sequence | *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
| | sequence | | 03/340,217 | sequence | or pepade sequence | Circulati, i pusible acceptance assertion, |
| | | | | | | |
| 4756 | 35124 | Α | 4797 | 3 | 565 | MLPGHLFCLAKAGKEEQEEKG |
| | | | | | | QIITRKTITPQNIPGPGAHITATH |
| 1 | | | | | | RGRCTVATKFSGGLCKEPNRLT |
| | | | | | | WY/GPPLKGAHGGR/GPSSRVPS |
| | | | | İ | | FPAAGQPPIGGALHGAGSRGLA |
| | | | | | | RTRAQLGGPPGGELRGT/SGNG |
| 1 | | | | | | DGQGPDGDSRKSGSPLRPSHL/P |
| | | | | | | DPAAVAGAPVSGHLQTPGHHA |
| | | | | | | GRRQQAGPRGAGLP |
| 4757 | 35125 | A | 4798 | 1 | 417 | |
| 4758 | 35126 | Α | 4799 | I | 1069 | MPRPPVPANALGARGEAVRLQ |
| | 1 | 1 | | | | LQGEELRLQE\ESVRLHQINIYL |
| | | | 1 | | | SDRISLHRRLPVRWNPLCKEKK |
| | | | | | | YDYDNLPRTS\VTKAFYNEAWS |
| | ļ | | 1 | | | TLLRTVYSVLETSPDILLEEVIL |
| 1 | | | | | | VDDYSDREHLKERLANELSGLP |
| | ŀ | ŀ | | | | KVRLIRANKREG\LVRARLLGA |
| | | | | | | SAARGDVLTFLDCHCECHEGW |
| | l . | 1 | | | | LEPLLQRIHEEESAVVCPVTDVI |
| | i . | 1 | | l | | DWNTFEYLGNSGEPQIGGFDW |
| | l . | | | | | RLVF\RWHTVPERERIRMQSPV |
| 1 | | | | | | DVIRSPTMAGGLFAVSKKYFEY |
| 1 | | | 1 | | | LGSYDTGMEVWGGENLEFSFRI |
| 1 | | | | | | WQCGGVLETHPCSHVGHVFPK |
| | 1 | | | | | QAPYSRNKALANSVRAAEVW |
| | l | | | | | MDEFKELYYHRNPRARLGLAC |
| | | _ | | | | DECSIKAGWWL |
| 4759 | 35127 | Α | 4800 | 1 | 1152 | MHNSDGIEVMRQQKAEIGRVG |
| | | | | | | GLEGIQLGVTEVIVNGARMLES |
| | | | | | | YNCKAELGATGLVNYQISVKC SNOFKLEVYLLNAENKVVDNO |
| | | | | | | AGTQGQLKVLGTNLWWPYLM |
| | | | | | | HEHPAYLYSWEGRPDGAQAVG |
| | | | | | | ALTPGTLAV\EVWLTAQKSLGP/ |
| | 1 | | | | | SDFYTLPVGLRTVAVTESQFLIS |
| | | | | | | GKPFYFHGVNKHEDADIQGKG |
| | | | | | | FNWPLLVKDFNLLCWLGANTF |
| 1 | | | 1 | | | CTSHYPYTEEMLQICYRYGIVVI |
| | | l | | | | DECPAPSGHT\GPSVPSLLARW |
| 1 | | 1 | | | | OLFNNVSMHHHMWVVEEPVL |
| | | | | | | RDKNHPAMVMWSLAKEPASFL |
| 1 | | 1 | 1 | | | ESAGYSFKSLTMEQTARVLDLD |
| | | | | l | | TGEAVLOYRSLPRGAHKTLGK |
| 1 | 1 | | | | | KRKISSYNVDLTSCOLAKEKCL |
| 1 | | | 1 | | | KGPSSFLQSRQERMNSELRDN |
| 4760 | 35128 | A | 4801 | 293 | 535 | TO GO EQUIQUE AND ENDIN |
| 4761 | 35129 | A | 4802 | 94 | 686 | |
| 4762 | 35130 | В | 4803 | 1 | 2187 | |
| 1702 | 100100 | 10 | 1.305 | <u></u> | 12.0. | L |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 4763 | 35131 | Α | 4804 | 596 | 1789 | MFHVIERPYECKECGKNFRSGY |
| | | | | | | QLTLHQRFHT\GIHKGGKPYEC |
| | | | | | | KECKKTFTLYRNLTRHQNIHTG |
| | | | | | | EKLFECKOCGKTYTTGSKLFQH |
| ŀ | 1 | | | | | OKTHTGEKPYECKECGKAFSL |
| | | | | | | YGYLKOHOKIHTGMKHFECKE |
| | | l | | | | CKKTFTLYRNLTRHONIHTGKK |
| | | | | | | LFECOECGKAYSTGSNLIQHRK |
| l | | l | | | | THTGEKPYKCKECGKTFSLHG |
| l | | | | | | YLNOHOKIHTGVKPYECKKIHT |
| 1 | 1 | | | i | | GGKPYECKECGKAFSRASNLV |
| 1 | | l | | | | OHERIHTGEKPYVCKOCGKTFR |
| | | 1 | | | | YGSALKAHQRIHRSIKVNOWL |
| | | | | | | DSPRHKSINCDPMSPRTRKTRE |
| | | | | | | RSHVSGRSLCQRLLGQGAQLRE |
| | | | | | | FKOPPRNRFRRVCGLVARNTFP |
| | | | | | | RGLRGRRASRRNAAASRLEDA |
| | | l | ŀ | | | VAELLKARCSALGGSGLPEGLS |
| 4764 | 35132 | Α | 4805 | 2 | 489 | COGEGAKWEQGMTGRRWVVG |
| 4704 | 33132 | l^ | 4803 | ľ | 407 | PPASSTPPHS/HFWLLVLSRGLV |
| | | | | | } | GIGEASYSTIAPTIIGDLFTKNTR |
| | | | | | | TLMLSVFYFAIPLGSGLGYITGS |
| | | | | | | SVKQAAGDWHCALRESFLQLV |
| 1 | | | | | | RLLKVTHLLQQLQLLYPTNGK |
| | | | | | | RODTNHTRSQCAHYLPHLDFQ |
| | | | 1 | ŀ | | VALCAYAVLOC |
| 4765 | 35133 | A | 4806 | l . | 327 | VALCATAVEQE |
| 4766 | 35134 | A | 4807 | 899 | 1219 | ANRKASTMRWYVRPFCSGLST |
| 1,,00 | 33134 | ľ` | 1.007 | 1077 | 1217 | LSREKLYPLRMLRMRASTGPLS |
| | | | | | | GALGMYSTASPRLMFSGCSISS |
| | | | | | | AR*LFRSSAVTMPPAAWMSFTI |
| | | | | | | WAVRLPL*KAWAPSMASVS |
| 4767 | 35135 | A | 4808 | 2152 | 2633 | SRLDCGQGLVNGSCDYHHGCT |
| 17707 | 33133 | ľ` | 1000 | 12.32 | 2005 | GDTPRRPEWHRSLAHCMSPVD |
| | | | | i | | SLPGCAVSGSSDPWEVSWLWO |
| | | | l | | | O/VDRCDNREE/VMW*QRLGFP |
| | | | | | | SPTVSFPORAVSASKPLO*APS |
| | | | | |] | WISLHSTLSQCRASDLRGRHTV |
| | | | 1 | | 1 | PEVVYEWSPCALPTHREHPNAI |
| | | | | | | MEGWPPPQAWWA |
| 4768 | 35136 | A | 4809 | 2 | 387 | SNASVILEGEDLRFSCSVRMAG |
| 4708 | 33130 | l^ | 4009 | ľ | 301 | RLOGRESVIWOLVDRONRRSDI |
| | | | l | | | MWLDR\DGTVOPGSSYWERSSF |
| | | | | | | GSVOMEOVOPNSFSLGIFNSRK |
| | | | l | | | |
| 1 | | | 1 | | | EDEGQYECHVTEWVRVVDGE |
| L | L | _ | L | L | l | WQIVGERRASTPISIIALGE |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X-Unknown, |
|--------|------------|-----|------------|-------------------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | | | |
| 4769 | 35137 | Α | 4810 | 46 | 3753 | EIRSWEKRKRLVLCLLEAADM |
| | | | | | | KCFFPVLSCLAVLGVVSAQRQV |
| | | | | | | TVQEGPLYRTEGSHITIWCNVS |
| | | 1 | | | | GYQGPSEQNFQWSIYLPSSPER |
| | | | | | | EVQIVSTMDSSFPYAIYTQRVR |
| | | | | | | GGKIFIERVQGNSTLLHITDLQA |
| 1 | | | İ | | | RDAGEYECHTPSTDKQYFGSYS |
| 1 | | | | 1 | | AKMNLVVIPDSLQTTAMPQTL |
| l | | | | | | HRVEQDPLELTCEVASETIQHS |
| | | | | 1 | | HLSVAWLRQKVGEKPVEVISLS |
| | | | | | | RDFMLHSSSEYAQRQSLGEVRL |
| | | | | | | DKLGRTTFRLTIFH |
| 4770 | 35138 | Α | 4811 | 1 | 3728 | MKCFFPVLSCLAVLGVVSAQR |
| | | | | | | QVTVQEGPLYRTEGSHITIWCN |
| 1 | ł | | | | | VSGYQGPSEQNFQWSIYLPSSP |
| | 1 | | | | | EREVQIVSTMDSSFPYAIYTQR |
| | | | | | | VRGGKIFIERVQGNSTLLHITDL |
| l | | | | | | QARDAGEYECHTPSTDKQYFG |
| | | | | 1 | | SYSAKMNLVVIPDSLQTTAMPQ |
| | | 1 | | | | TLHRVEQDPLELTCEVASETIQ |
| | | | | | | HSHLSVAWLRQKVGEKPVEVIS |
| 1 | | | | | ľ | LSRDFMLHSSSEYAQRQSLGEV |
| | | | | | | RLDKLGRTTFRLTIFHLQPSDQ |
| | | _ | | | | GEFYCEAAEWIQDP |
| 4771 | 35139 | A | 4812 | 897 | 1217 | ANRKASTMRWYVRPFCSGLST |
| | | l | | l | | LSREKLYPLRMLRMRASTGPLS |
| 1 | | | | ŀ | | GALGMYSTASPRLMFSGCSISS |
| 1 | | | | ľ | | AR*LFRSSAVTMPPAAWMSFTI |
| | l | | L | l | l | WAVRLPL*KAWAPSMASVS |

553

| SEQ ID | SEQ ID NO: | | SEQ ID NO: | Nucleotide | | Amino acid sequenec (X=Unknown, |
|--------|------------|-----|------------|-------------------------------|---------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop eodon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 4772 | 35140 | A | 4813 | 1 | 1507 | MWNSKINHDHDDQFLKTYYVL |
| | | 1 | | | | ESSISVGVASNASVILEGDDLRF |
| | 1 | | | | | SCSVRMAGRPQGRFSVIWQLV |
| | | 1 | | | | DRONCRSNIMWLDRDGTVOPG |
| | | 1 | | | | SSYWERSSFGSVQMEQVQPNSF |
| | | 1 | | | | SLGIFNSRKEDEGQYECHVTEW |
| | | | | | | VRVVDGEWQIVGERRASTPISII |
| | 1 | 1 | | | | ALEMGFAVTAISRTPGVTYSDS |
| | | l | | | | FDLQCIIKPHYPAQVPVSVTWR |
| | | | | | | FQPVGTVEFHDLVTFTRDGGV |
| | | l | | | | OWGDRSSSFRTRTATEKAESSN |
| | | l | | | | NVRLIISRASDTEAGKYQCVAE |
| | | | | | | LWWKNYNNTWTQLAERTSNL |
| | | 1 | | | | LVIRVLOPDRMGVSARALRGEP |
| | | l | | | | SPSOMPOACCHGNTGALVIGIN |
| ĺ | | | | | | EPESLPCLQTVTKLQVSKSKRT |
| | | | | | | LTLVENKPIQLNCSVKSQTSQN |
| l | | | | | | SHFAVLWYVHKPSDANGKLIL |
| | | 1 | | | | KTTHNSAFEYGTYVEEEGLRAR |
| | | | | | | LOFERHVSGDLFSLTVORAEWL |
| | | 1 | | | | LSPNYAWYKLAEEVSGRTEVT |
| | | | | | 1 | VKQPGGSLGLGC\SVSGWAAEP |
| | | | | | | VCTQGPRPCSWNTPLALTAAC |
| 4773 | 35141 | Α | 4814 | 1 | 627 | |
| 4774 | 35142 | A | 4815 | 166 | 435 | |
| 4775 | 35143 | В | 4816 | 1 | 240 | LILIO LOGO CALLO TOPO DO CALLO DO |
| 4776 | 35144 | A | 4817 | 1 | 288 | VVPASSPGAASEPRRRRRCLQP |
| ł | 1 | | | | | EKSVSPGSGGGHRDPPKARPPR |
| ŀ | | | | | | PPSAPKP*RPRPFS*LARSLCFPA |
| ŀ | | | | | | AGCAYGVGVGGAGGGRAGLR |
| | | ۱. | 1010 | 201 | 1041 | QPVPAVAE |
| 4777 | 35145 | Α | 4818 | 206 | 1041 | VSVGSAPSDMPAAATRW/CNSR |
| ŀ | 1 | l | | | | CQHGQRLSAR/PVAGPGT/RTSS |
| | 1 | | | | | FPWLAPRNVVVPGSLEMPGTA |
| l | 1 | | | | | GPQRGSHSSPQGSSALLSFS/CV |
| | | 1 | | | | HNVESKEPVCLLLPSMASRLLT |
| 1 | 1 | | | | | PRGTCRPVPGCLQHPLSLPPVL |
| l | | | | | 1 | VGTQSPSQAPKSAKRPSPQPQL |
| l | | | 1 | | 1 | GWLQLHPGGSGLCLLPAPAGS |
| l | | | 1 | | i | MECAALESVPSQLGIGAPGPCW |
| l | | | | | 1 | AQAGVQGWSNVATSSPSGPSA |
| | | | | | | QGQPRAPPCLVCGPAQCGTSGS |
| | | | | | | RSRATGLRPSCLECQVWWSPQ |
| | L | ļ | | | | CGANPGDTTSSQDAGTRCSKV |
| 4778 | 35146 | A | 4819 | 2 | 487 | |

| SEO ID | SEO ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 4779 | 35147 | A | 4820 | 152 | 758 | RGARGPEWDGOLDGPGSOMC |
| | | | | | | GMASAPRLRRSGVRAAAGHPV |
| | | | | Ì | | QQPRLLDGLSLTDESDSCVSFEP |
| | | | | l | | PSHPSSSSGPVTALSRGWNFLK |
| | | | | 1 | | AFPLMGETOERER/VLTHFSRR |
| | | | | | | YCQCNPD/AQPSEDGIH/TLTCA |
| | | | | | | LMLLNTDLHGHVIGEVTGETN |
| | | 1 | | | | RTDKQQNRTEQSKRQANADKH |
| | | | | ŀ | | NEHANNEOOHEHDKDNDTRTR |
| | | | | | | DTEMRHAKRDNA |
| 4780 | 35148 | A | 4821 | 100 | 220 | |
| 4781 | 35149 | Α | 4822 | 100 | 1588 | CLKISTGYTGSMAEEASGNLTI |
| | | | | | | MAEGEGEAGTSTHGQSRRKRE |
| | | | | | | KEEVLHPFKQPDLVRSHYRENS |
| | | | | ŀ | | KEEICPHDSVTSCQTPPPTLGITI |
| 1 | | 1 | | | | RHEIAASICHVADTAGVAGDA |
| | | | | i | | MMRKTDLIPPFIGLTLQGGRSA |
| 1 | | l | | | | DMGNQKKWRKGSENLATLVA |
| 1 | | | | | | MASERFHWQYSGNSTIQPKQK |
| | | | | | | QHGMITRLVTAPVCPGLVQPSL |
| | ľ | | | Ì | | CAVGLRNIMSLSSHTCALQNTK |
| | | | | l . | | QAWEGYDDCHSQRVSQPGEN |
| | ľ | l | | | | MTKLSFLNLLNQMPSWGEGKM |
| | | | | } | | VPADFSGSCWEGTGTGSPAGSQ |
| | ľ | i | | | | VSFLNRHNDGQLAGDSPGLPPP |
| | ľ | | | | | PCPRGLQGAEQRSALRRHKAD |
| | ŀ | | | 1 | | VHRDQWLVISFSKKLRTSARK |
| | ŀ | | | ŀ | | WYEAGPFSGVPRVLPAAAQGG |
| | | | | 1 | | TDFPFSPSEEPFQPSPFSMVQAH |
| | ŀ | | | l | | TVRSKPQFHFPAAGENCLNRSE |
| | | | | | | LSRNQGLQARVGPLAIMSSDPS |
| | | | | ł | | GDFVLYTPTILGFVGLEVLVSR |
| | | | | l | | EGTFLWRYSTCP\LNYKLWLPP |
| | | | | | | GYLGLLVPKDQKVRAVFLGM |
| 4782 | 35150 | Α | 4823 | 1329 | 1881 | AHLEAAGWSSSVQPGPSPRVLG |
| | } | l | | | | RAEEHGQQSGRAKEIGHKIPKE |
| i | | 1 | | ŀ | | TFDELTAELETISSK\CLYLAKK |
| | | | | | | NQVIQQELLSMKEVQQKCKKL |
| | | | | | | EEVNKILEQEVVNLKTHEKNM |
| | | | | 1 | | VEFGDVEECKLQLEERAGQEIE |
| | | | | 1 | | KLEEINLQRACLSAKKVRAEGE |
| | | | 1 | 1 | | LEPRRHHNHTLGFTEGPWGLM |
| | | | 1 | | | SVITGAYDLIR |
| 4783 | 35151 | A | 4824 | 176 | 308 | LGNLTSPFFN*KHRSTKGFTTLS |
| 1 | | 1 | | | | TVALLLTGHVGIKTSNCHPGY |
| | | | | | | |

| SEO ID | ISEO ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide lucation of last | Amino acid sequence (X=Unknown, |
|--------|------------------------|----------|-----------------------|--|--|---|
| NO: | of peptide sequence | hod | in USSN 09/540,217 | location of first codon for peptide sequence | codon for last amino acid of peptide sequence | *-Stop codon, /-possible nucleotide deletion, \-possible nucleotide insertion) |
| | | | | | | |
| 4784 | 35152 | Α | 4825 | 1467 | 1890 | DWFDELTAELETISSK\CLYLAK |
| | | | | | | KNQVIQQELLSMKEVQQKCKK |
| | 1 | ŀ | | | | LEEVNKILEQEVVNLKTHEKN |
| | | | | | 1 | MVEFGDVEECKLQLEERAGQE |
| | 1 | | | | 1 | EKLEEINLQRACLSAKKVRAEG |
| | l | | | | | ELEPRRHHNHTLGFTEGPWGL |
| | | <u> </u> | | | | MSVITGAYDLIR |
| 4785 | 35153 | В | 4826 | I | 753 | |
| 4786 | 35154 | A | 4827 | 225 | 410 | |
| 4787 | 35155 | A | 4828 | 225 | 410 | |
| 4788 | 35156 | Ā | 4829 | 225 | 1001 | COURCE ON THE LEWIS POLC |
| 4789 | 35157 | Α | 4830 | 141 | 1001 | GGVRGVQQKETCAFKVLESIG |
| | | ľ | | | | KLG\LALSVAGGAENSALYNVE |
| | | | | | | AGHRAVIFDRFRGEQDIVVGEG |
| | | | | | | THFLIPWVQK/PPIIFDCRSRPRN |
| | ļ | ļ. | 1 | | | VPVITGSKDLQNVNITLRILF\RF |
| | ŀ | | | | | VASQLPRIFTSIGEDYDERVLPS |
| | | ŀ | | | | TT\ENLKSVVAPFDAGELITQRE |
| | Į. | | | | | LVSRQV\SDDL\TERAATFGLIL |
| | | | | | | DDVSLTHLTFGKEFTEAVEAKQ |
| | | | | | | VAQQEAQRARFVVEKAEQQKK |
| | | | | | | AAIISAEGDSKAAELIANSLATA |
| | | | | | | GDGLIELRKLEAAEDIAYQLSR |
| 4790 | 25150 | | 4831 | 194 | 453 | SRNITYLPTG\QSVLLQLPQ QPLPEPLELRPKAL*LTPSQIFSA |
| 4/90 | 35158 | Α | 4851 | 194 | 433 | |
| | | ŀ | | | | *RLKTAARLPRKPWAVLPQGFT DTPPHFSQAQISSSSVTYLSIILV |
| | | | | | | KTHVLCSPEFHRTGVV |
| 4791 | 35159 | A | 4832 | 1 | 86 | PCESYLEHL*WSCRLLRRLGSV |
| 4/91 | 33139 | ^ | 4032 | 1' | 00 | SLOLLS |
| 4792 | 35160 | С | 4833 | 191 | 263 | SEQUES |
| 4793 | 35161 | В | 4834 | 1 | 741 | |
| 4794 | 35162 | A | 4835 | 3 | 96 | |
| 4795 | 35163 | A | 4836 | li . | 301 | QEQQKMNTLQGPVSFKDVAVD |
| 4173 | 33103 | ľ` | 4050 | ľ | 501 | FTOEEWROLDPDEKITYGDVM |
| | | | | 1 | | LENYSHLVSLAYEVATSCTSEIL |
| | | | | | | KPSNLPKSFFFSH*QDMISPSQT |
| | | | | | | SSLSWSRERSCG |
| 4796 | 35164 | Α | 4837 | 3 | 273 | VLHFISAGNTFAHQQEHSPRKG |
| | 33,04 | Γ. | 1.03, | ľ | 2.3 | PNNLSKRKLLPAV\GPRVFHGE |
| | | 1 | 1 | I | | DRHL/LFSTRKE*ARSLCYVQG |
| | 1 | | 1 | | I | |
| | 1 | 1 | | | | GVQAPAAAFCSLLSLWGWAGC |

| SEO ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|----------|------------|-------------------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | | *=Stop codon, /=possible nuclcotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 4797 | 35165 | Α | 4838 | 3062 | 3688 | RSVTRAPPRSTFPLAQAPSPRSH |
| | | 1 | | | | HIREPTPSPHLGPLRGSHRGPPS |
| | | 1 | | İ | | RPLPPALAALSLLETLQPRLLHP |
| | | 1 | | | | HLHL\LHDQGRACVRAYAHPS |
| | | 1 | | | | YLWRCHALGVWVES/ARLRPS |
| | | 1 | | | | ALPPAHSPPLAAPLLSSSVQPPA |
| | | | | | PALEPPPRPPAAGAAARCLAAQ | |
| | | | | | HHHPSRLGVRQPPLAVGALGST | |
| | | | | | | WPPQAPAPPPELSALEQDRVGA |
| | | ļ | | | | QPPPPPSQGA |
| 4798 | 35166 | A | 4839 | 1 | 197 | |
| 4799 | 35167 | С | 4840 | 26 | 358 | |
| 4800 | 35168 | Α | 4841 | 84 | 433 | PASAPLGLSATVSACFQEQQKM |
| | 1 | | | | | NTLQGPVSFKDVAVDFTQEEW |
| | | 1 | | | 1 | RQLDPDEKITYGDVMLENYSH |
| | 1 | | | | | LVSLAYEVATSCTSEILKPSNLP |
| l | | | | | | KSFFFSH*QDMISPSQTSSLSWS |
| | | 1 | | | | RERSCG |
| 4801 | 35169 | Α | 4842 | 1 | 372 | VQWLFMQICLGGKHQQLRHQG |
| | 1 | İ | | | | VQEKMLPLEGS*VIEAGSPTLIG |
| 1 | 1 | | | | | ETLSLEIINYIIGAGLESVHTHKS |
| | | 1 | | | | RQLGGWTRPGSHFQQVLIPAHT |
| İ | | 1 | | | | PMNLEPSQLSLEPRLVPAQQSL |
| | | <u> </u> | | | | PSAPTPSKALSQ |
| 4802 | 35170 | В | 4843 | 7 | 267 | |
| 4803 | 35171 | В | 4844 | 213 | 3895 | |
| 4804 | 35172 | С | 4845 | 141 | 359 | |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | : | |
| 4805 | 35173 | Α | 4846 | 831 | 3017 | RRRLHYSGSTRPWRTRAMLPR |
| | | | | | | TLSLRPHLSLSLHLPLPCLLLHL |
| | İ | | | | | LPTHLPPGPKHQPTVREL/ARRO |
| | ļ. | 1 | | | | RLPRACHPAONLLEQQPLRPSH |
| | i i | | | | | LQRH/LSLLPPLGLSQSGPPG/LA |
| | ŀ | | | | | PQPLL*LQTPDHFAGADPCSIHO |
| | į. | | | 1 | | TSH*HOGTSNPSGRDGYQTPSH |
| | | | | 1 | | ICP\SPAPKOSFLFGTONTSPSSP |
| | | | | 1 | i | AAPAASSAPPMFKPIFTAPPKSE |
| | | | | 1 | | KEGPTPPGPSVTATAPSSSSLPT |
| 1 | | | ĺ |] | | TTSTTAPTFQPVFSSMGPPASVF |
| | | | | | Į. | LPAPFFKQTTTPATAPTTTAPLF |
| | | | İ | 1 | | TGLASATSAVAPITSASPSTDSA |
| | 1 | ĺ | ĺ | i | | SKPAFGFGINSVSSSSVSTTTST |
| i i | | | | | | ATAASQPFLFGAPQASAASFTP |
| 1 | | | | | | AMGSIFQFGKPPALPTTTTVTTI |
| | | | | | | SOSLHTAVPTATSSSAADFSGF |
| 1 | | | | | | GSTLATSAPATSSOPTLTFSNTS |
| | | | | | | TPTFNIPFGSSAKSPLPSYPGAN |
| | | | | | | PQPAFGAAEGQPPGAAKPALAI |
| | | | | | | SFGSSFTFGNSAAPAPATAPTPA |
| 1 | | | | | | PASTIKIVPAHVPTPIQPTFGGAT |
| | | | | | | HSAFGLKATASAFGAPASSOPA |
| | | | | | | FGGSTAVFSFGAATSSGFGATT |
| | | | | | | OTASSGSSSSVFGSTTPSPFTFG |
| 1 | | | | | | GSAAPAGSGSFGINVATPGSSA |
| 1 | 1 | | 1 | | | TTGAFSFGAGQSGSTATSTPFT |
| | | | | 1 | | GGLGQNALGTTGQSTPFAFNV |
| 1 | | l | | 1 | | GSTTESKPVFGGTATPTFGQNT |
| 1 | | | | | | PAPGVGTSGSSLSFGASSAPAQ |
| | | l | | | | GFVGVAPFGNTFAHQQEHSPR |
| | | | | | | KGPNNLSKRKLLPAVRAQGPPF |
| 4806 | 35174 | Α | 4847 | 9 | 935 | IPCFGCAMPMYQTRRQENDLR |
| | | | | | | TASIAV*RRKQQDDH*KQRRW |
| 1 | | | | | | QNIQRKGPKRYIVIAGNSQSHQ |
| | | | | | | PMIFSMLRKLPKVTCRDVLPEIF |
| 1 | | | | | | AICIEEIGCWMQSYSTSFLTDSY |
| | | | | | | LKYIGWTLHDKHREVRVKCVK |
| | | | | | | ALKGLYGNRDLTARLELFTGRE |
| | | | | | | KDWMVSMIMDREYSVAVEAV |
| 1 | İ | | | | | RLLILILK\NMEGVLMDVDCES |
| | | | l | | 1 | VYPI\V*ASN*ALASAVGEFLYW |
| | 1 | | 1 | | | KLFYPECEIRTMGGREQRQSPG |
| 1 | | | 1 | | | AQRTFFQLLLSFFVESKSHFVTQ |
| l | | | | 1 | 1 | GGGSGQFSAHRNLCLPGSGNFF |
| 1 | | | | | | VSASRVAGIAGAPPHTWLIYVF |
| 4807 | 35175 | Α | 4848 | 1 | 1749 | |
| 4808 | 35176 | В | 4849 | 282 | 1227 | |

| SEQ ID | SEO ID NO: | Met | SEQ ID NO | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | ŀ | | sequence | | |
| 4809 | 35177 | A | 4850 | 221 | 907 | FEDSFNRGVKKKAAKRPLKTTP |
| 4007 | 33177 | ľ. | 1.050 | 1 | · · · | VAKYPKKGSQAVHRHSRKQSE |
| | | | | | | PPANDIFNAAKAAKSDMQHRE |
| | | 1 | | l | | VRVKCVKALKGLYGNRDLTAR |
| | | | Ì | | | LELFTGRFKDWM\VSMIMDRE |
| | | | | | | YSVAVEAVRLLILILKNMEGVL |
| | | | | 1 | | MDVDCESVYPIVLFYPECEIRT |
| | | | | i | | MGGREOROSPGAORTFFOLLLS |
| ł | | 1 | | | | |
| | | 1 | | | | FFVESKLHDHAAYLVDNLWDC |
| | 1 | i | | 1 | | AGTQLKDWEGLTSLLLEKDQS |
| 4810 | 35178 | В | 485I | I | 2361 | TCHMEPGPGTFHLLG |
| 48II | 35178 | B | 4852 | 11 | 878 | |
| 4812 | 35180 | Ā | 4853 | li | 313 | MPHTPRCLFRPQASCLVHFLEQ |
| 10.2 | 33.00 | ľ. | 1000 | ľ | 1 | QNKLLETKLQFFQNRECCKSNL |
| | | | | 1 | | EPLFEGY\TLRREAECMEANSG |
| } | İ | | | 1 | | RLASELNHVQEVLEGYKKKYE |
| | 1 | | | 1 | | EEVALKATAENEFVALKK |
| 4813 | 35181 | A | 4854 | 188 | 354 | CEVALKATACNET VALKK |
| 4814 | 35182 | A | 4855 | 405 | 647 | LPLISDOVSYSPPLMSKSLASLY |
| 7017 | 33102 | | 4055 | 1.00 | 1 | QESY*TILARIPLPLISPFVNSLST |
| | 1 | | | 1 | | DLFILLIGNTSIAIFAEFGVSAISL |
| | | | | 1 | | PSCNSLE |
| 4815 | 35183 | A | 4856 | 1 | 585 | MSSGEGKRTWLGSLWGGVRVP |
| 1015 | 155.05 | | 1000 | ľ | | VPPPICGLRVAVTSAGTSSFSLA |
| | | 1 | | Ì | ľ | PKPTRIRGERGKGQGRG/SSGN |
| | | 1 | | | | GGRGRAGASAGGSRGEVVSVA |
| | | | | | | NDGRWRGRGRGVGCPRSSKRE |
| | | | | | | DNRFAKHGRASGKA WEPHPPS |
| | | | | | | QALRALFGPIRRGRAAETRIV |
| | | 1 | | | | YWIKDROLTNRDSTILELOKVL |
| | | 1 | | | | KTCCAQSMKIFCCLWNFVYKQ |
| 4816 | 35184 | С | 4857 | 12 | 468 | Treeriquiniti sezinii viitq |
| 4817 | 35185 | Α | 4858 | 1 | 1156 | MAFRKKIITAGCIDHVLSVSDS |
| | | | | | | QQMQANLTQRTEAEIRKQTQIA |
| | | l | | | | PTFPAHSLPDKYLGFALLNRKII |
| | | ĺ | | | | GTFLVFNMCKRNHEDKNEAFT |
| | | 1 | | | | VLREKKVFNLEFCTLQNYSSEV |
| | • | 1 | | | | KEKERORFSDKOTLREFATRKP |
| | | | | 1 | | ALKEMLKVLQRYKERKHIRKR |
| | | | | | | NVKYSADHTTDHTANQADPNQ |
| | | | | | | QEPHVPGHAPDNKTIRQKQNQ |
| | ļ | | | 1 | | HKDNTTRKHNOMTSDTSRTNT |
| | | | | İ | | KVSGQPRGKQTRRRHERQQKA |
| | 1 | l | | | | RERGOHROK/RDAOTREHTOR |
| | | 1 | | | | QRQARAEE\QVIENKREEKRTS |
| | | 1 | l | 1 | | ERTNDSTRREGTRRPRRTEKGE |
| | 1 | 1 | l | 1 | | ROEEGDRATATHRKDHDROOP |
| | | l | | 1 | | HGAPHCSRSSRHGAPTGPLYCC |
| 1 | | 1 | | 1 | | SPLPGTPSCTICTVQYGRLWPH |
| | | 1 | | 1 | | MATEQLNMAGPNQDFQDVVW |
| | | | L | | l | INT LEAFINWARE LACE AND A M. |

| SEQ ID | | | SEQ ID NO: | | Nucleotide location of last | |
|--------|------------|-----|------------|-------------------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 4818 | 35186 | Α | 4859 | 1 | 1580 | MAPALLLLLLASGAAACPLPCV |
| | | | | | | CQNLSESLSTLCAHRGLLFVPP |
| | Ì | | | | | NVDRRTVELRLADNFIQALGPP |
| | İ | | | | 1 | DFRNMTGLVDLTLSRNAITRIG |
| | | | | | | ARAFGDLESLRSLHLDGNQAG |
| | l | | | | | GAGHPRALRGPVNLQHLILSGN |
| | İ | | | | 1 | QLGRIAPGAFDDFLESLEDLDLS |
| | ŀ | | | | | YNNLRQVPWAGIGAMPALHTL |
| | | | | | | NLDHNLIDALPPGA\FAQLGQLS |
| | ļ | | | | 1 | RLDLTSNRLATLAPDPLFSRGR |
| | | | | | | DAEASPAPLVLSFSGNPLHCNC |
| | | | | | | ELLWLRRLARPDDLETCASPPG |
| | l | | | | | LAGRYFWAVPEGEFSCEPPLIA |
| | l | | | | | RHTQRLWVLEGQRATLRCRAL |
| | l . | | | | | GDPAPTMHWVGPDDRLVGNSS |
| | l | | | | | RARAFPNGTLEIGVTGAGDAG |
| | | | | 1 | | GYTCIATNPAGEATARVELRVL |
| | | | | | | ALPHGGNSSAEGGRPGPRTSPP |
| 1 | l | 1 | | | | PLALLPRYNSSEDETLIYRIVPA |
| | l | | | l | | SSHHFLLKHLVPGADYDLCLLA |
| | | | | ľ | | LSPAAGPSDLTATRLLGCAHFS |
| | | l | | | | TLPASPLCHALQAHVLGGTLTV |
| | İ | | İ | | | AVGGVLVAALLVFTVALLVRG |
| | | | | | | RGAGNGRLPLKLSHVQSQTNA |
| 4819 | 35187 | Α | 4860 | 2 | 403 | |
| 4820 | 35188 | Α | 4861 | 87 | 442 | PVFPWHPYSKDQKEESQSVLVI |
| | į. | | | | | WQKTAGGGWSTWWILSFSPET |
| | | | | | 1 | EKVVKK/AHVDTL*NEMWDVT |
| | l | | | ĺ | | K*TAFKIPSCT*HQQHP*SFFRK |
| | l | | | 1 | | SESQVIVFAGQGVKIH*YILLHS |
| | | | | | | NVIHYMNEI |
| 4821 | 35189 | A | 4862 | 2 | 651 | EFIKQWDADKFEHIQTLEGHHQ |
| | | | | l | | EIWCLAVSPSGDYVVSSSHDKS |
| | | | | l | | LRLWERTREPLILEEEREMERE |
| | 1 | | | l | | AEYEESVAKEDQPA\VPGEIQG |
| | | | | | | D\SYFT*KKTIETVK\AAERIMEA |
| | 1 | | l | l | | FELYREETAKMKEHKAICKAA |
| | | | İ | 1 | | GKEVPLPSNPILMAYGSISPSAY |
| | 1 | | l | 1 | | VLEIFKGIKSSELEESLLVLPFSY |
| | | | l | | | VPDILKLFNEFIQLGSDVELICR |
| | 1 | | l | ŀ | | CLFFLLRIHFGQITS |

| SEO ID | SEO ID NO: | Met | SEO ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|--------------|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | 1 | ĺ | sequence | | |
| | | | | | | |
| 4822 | 35190 | A | 4863 |]1 | 703 | MGLTKQYLRYVASAVFGVIGS |
| | | [| | | | QKGNIVFVTLRGEKGRYVAVP |
| | | 1 | | | | ACEHVFIWDLRKGEKGLKQEV |
| | | | | | | TCLCPSPDGLHLAVGYEDGSIRI |
| | | | | | | FSLLSGEGNVTFNGHKAAITTL |
| | | | | | | KYDQLGGRLASGSK/RQPGGIV |
| | | | | | | FTESILAYSSACQDKQNHYWGS |
| | | | | | | SQ*CADFVIQLRQYCCSFSCS*F |
| | | l | | | | H*NMEQVYTAVYSHNDL*ICTL |
| | | 1 | | | | LILCTW**TGSHRNKAPKTMFP |
| | | | | | | RCTEGLDRGNRPATHS |
| 4823 | 35191 | В | 4864 | I | 2616 | |
| 4824 | 35192 | A | 4865 | 3 | 674 | PECTGRTLRSASQOHDTFYILA |
| | | 1 | | 1 | | CELNSLADDAQR\YDVP\NSCL |
| | | 1 | | 1 | | YPPDLPWRPVMQAKKKELARR |
| | | 1 | | 1 | | DDIEDGDSMISSATSDTGSAKR |
| 1 | i | 1 | | | | KSKKNIRKORMKILFNVVLEAR |
| | | | | | | EPGSGRRLCDLFMVKPSKKDYP |
| 1 | | 1 | | | | DYYIILEPMDLKIIEHNIRNDKY |
| 1 | | 1 | | 1 | | AGEEGMIEDMKLMFRNARHYN |
| | | 1 | | 1 | | EEGSOVYNDAHILEKLLKEKRK |
| | | 1 | l | | | ELGPLPDDDDMASPKLKLSKA |
| | | 1 | | | ł | ASHFII |
| 4825 | 35193 | | 4866 | 3 | 425 | ASFILII |
| 4826 | 35193 | A | 4867 | 1 | 1115 | LCSVPTLCLASSHLVSNLSTFKQ |
| 4826 | 35194 | A | 4867 | ' | 1113 | TSSFIRHVVATLLGLYLALFCF |
| | | 1 | l | | | |
| 1 | | | | | | GWYALHFLVQSGISYCIMIIIGV |
| | | l | | | | ENMHNYCFVFALGYLTVCQVT |
| | | 1 | | | | RVYIFDYGQYSADFSGPMMIIT |
| 1 | | | ł | | | QKITSLACEIHDGMFRKDEELT |
| | | l | | | | SSQRDLAVRRMPSLLEYLSYNC |
| | | | | | | NFMGILAGPLCSYKDYITFIEGR |
| | | | | | | SYHITQSGENGKEETQYERTEP |
| 1 | | | | | | SPNTAVVQKLLVCGLALLFHLT |
| | | | İ | | | ICTTLPVEYNIDEHFQATASWPT |
| | | | | 1 | | KIIYLYISLLAARPKYYFAWTLG |
| | | 1 | | | | TAPRKWSPCPGPQCIQLRAADP |
| | | 1 | | | | SGPEPLLMLSSQERQPKAKPPK |
| | | 1 | 1 | 1 | 1 | EAHADIAGTPREGEKTRTGGPG |
| | | | | | | KAFLRDPGASSSVELSRTQLWV |
| | | | | | | LTPPPIAKAPCECLQ |
| 4827 | 35195 | В | 4868 | 218 | 656 | |
| 4828 | 35196 | A | 4869 | 1 | 180 | |
| 4829 | 35197 | A | 4870 | 12 | 199 | GLFPLEPGANGI*GC/SGRIRAQ |
| 1 | | 1 | | l | l | RWLPGRPKFTGESFIR*PPRVAK |
| 1 | 1 | 1 | | l | l | ESGQLIWFGCVPTQISS |
| | | | | | l | |

| SEO ID | ISEO ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|-------------|--|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | 1 | 09/540,217 | codon for peptide | of peptide sequence | delction, \=possible nucleotide insertion) |
| | l | | | sequence | | |
| 4830 | 35198 | A | 4871 | 1 | 5058 | MKLRGVSLAAGLFLLALSLWG |
| 7030 | 33120 | l^ | 1071 | l' | 5050 | QPAEAAACYGCSPGSKCDCSGI |
| | 1 | ļ. | | | | KGEKGERGFPGLEGHPGLPGFP |
| 1 | | l | | | 1 | GPEGPPGPRGQKGDDGIPGPPG |
| 1 | | ŀ | | | | PKGIRGPPGLPGFPGTPGLPGMF |
| ŀ | | | | | | GHDGAPGPQGIPGCNGTKGER |
| 1 | | ļ. | | | | GFPGSPGFPGLQGPPGPPGIPGM |
| | | ŀ | | | | KGEPGSIIMSSLPGPKGNPGYPG |
| | | | | | | PPGIOGLPGPTGIPGPIGPPGPPG |
| | | ŀ | | 1 | ł | LMGPPGPPGLPGPKGNMGLNF |
| | | ŀ | | | | |
| | | 1 | | | | QGPKGEKGEQGLQGPPGPPGQI |
| 4831 | 35199 | ļ. — | 4872 | 3 | 1646 | SEQKRPIDVEF |
| 4631 | 33199 | Α | 4872 | P | 1040 | EDEGRAKGHHTWQQTRENESQ |
| | | ŀ | | | | AKGETPYKTIRFRETYYHKNSM |
| 1 | | ľ | | | | GETTPMIQLSPTGSLPQHVGIM |
| 1 | | | | | | GATIQDKIWVTPGLPGFPGTPG |
| | | | | 1 | | LPVKRGFPGSPGFPGLQGPPVIP |
| | | 1 | | l | | GPTGIPGPIGPPGPPGLMVTPGP |
| 1 | 1 | | | | | PGLPGPKVNMGLNFQGPKGEK |
| | | | | | | VKQGLQGPPGPPGQISEQKRPID |
| | l | | | 1 | | VEFQKGDQVIPGDRGPPGPPGI |
| | | | | | | RGPPVTPGGEKGEKGEQGEPG |
| | | ŀ | | | | KRVKPGKDGENGQPGIPVMPG |
| | | | | | 1 | DPGYPGEPGRDG/EKGNAVMG |
| | | 1 | | | | PPGPPGFPGERGQKGDEGPPGIS |
| | | | | | | IPGPPGLDGQPGAPGLPGPPGPA |
| i i | | | | | | GPHIPPSNKGDTCFNCIGTGISG |
| | | | | | | PPGQPGLPGLPGPPG\IPGAPGA |
| 1 | 1 | | | | | PGFPGSKGEPGDILTFPGMKGD |
| 1 | | ľ | | | | KGELGSPGAPGLPGLPGTPGQD |
| | | | | | | GLPGLPGPKGEPVRITFKGERGF |
| | | | | | | PGNPGLPGLPGNIGPMGPPGFG |
| | | ļ. | | | İ | PPGPVGEKGIQGVAGNPGQPGI |
| | | ŀ | | | | PGNKGDPGQTITQPGKPGLPGN |
| | | | | l | | PGRDGDVGLPGIPGLPGQPGLP |
| 1000 | 0.000 | ١. | 1072 | 110 | 244 | GIPGSKGEPGIPGIGLPGPPGPK |
| 4832 | 35200 | A | 4873 | 110 | 256 | CSGTYRCYSF/HSRDPYLWSAPS |
| 1 | | 1 | | | | DPLE/LVVTGPARQYYTKGNLV |
| | | <u>. </u> | | | **** | RIASGL |
| 4833 | 35201 | A | 4874 | 2 | 2888 | LSDPCSSRWDERSLSQRSRSWS |
| | | | | | | YNGYYSDLSTARHSGHHKKRR |
| | | | | | | KEKKVKHKKKGKKQKHCRRH |
| | | 1 | | | | KQTKKRRILIPSDIESSKSSTRR |
| | | | | | | MKSSCDRERSSRSSSLSSHHSSK |
| 1 | | 1 | | l | 1 | RDWSKSDKDVQSSLTHSSRDSY |
| 1 | 1 | 1 | | l | | RSKSHSQSYSRGSSRSRTASKSS |
| 1 | | | | l | | SHSRSRSKSRSSSKSGHRKRAS |
| 1 | | 1 | 1 | l | | KSPRKTASQLSENKPVKTEPLR |
| 1 | | 1 | l | I | } | ATMAQNENVVVQPVVAENIPV |
| 1 | 1 | 1 | | l | | IPLSDSPPPSRWKPGQKPWKPS |
| 1 | I | 1 | I | 1 | 1 | YERIQEMKAKTTHL |

| NO: | SEQ ID NO: of peptide | | | | | Amino acid sequence (X=Unknown, |
|------|--------------------------|----------|------------|---------------------------------|---------------------------|--|
| | | hod | in USSN | Nucleotide location of first | codon for last amino acid | *-Stop codon, /-possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| | | <u> </u> | | 350 | 986 | LWGGGSARLLRLPRGPCLPPAS |
| 4834 | 35202 | A | 4875 | 330 | 986 | |
| | | | | | | PSSPSSSSELS*SCSLGPSSSSSSS |
| | | | | | | SSSCSLCPSSSSSSSSP*LPPSSSS |
| | | | | | | SSSRPLPPPSSSSSSSSSSSSSSSSS |
| | | 1 | | | | SECLCSPSSRPRTTVAGLGPAPG |
| | | | | | | FPSGPVDTCSVWLLRFTSTMIW |
| | | | | | | DCSLRL*VPEPPSSSSNSSPPSSL |
| | | | | | | HKLAGGPPASSTPPSFSSLKKG |
| | | | | | | WAGPMVAGTVPPAVPAPSSTR |
| | | | | | | TE |
| 4835 | 35203 | A | 4876 | 1 | 496 | SQSYS\RGSSRSRTASKSSSHSRS |
| | | | | | | RSKSRSSSKSAVLASTARCAGS |
| | | | | | | RKQCVPLPIRLCQLQSRSLQPS |
| | | | | | | MVPWRWGLTGPRGIALPPAAR |
| | | 1 | | į | | PGPLHEAPRWGPPPRRAPRPWP |
| | | l | | | | PGARPGRRRRRAAASPAPSSCG |
| | | l | | | | PRASGAAGGGRGAPIGARASA |
| | | | | | | GAAVWTPISTT |
| 4836 | 35204 | Α | 4877 | 3 | 4578 | TLAVFVPTLAGFSVALGGPAW |
| | | l | | | | GRRRRSVSGVGVWLQWQCFLF |
| | | l | | | | CSRGPAQAGGQPALAATSVAM |
| j | | | | | | GAQDRPQCHFDIEINREPVGRI |
| | | | | | | MFQLFSDICPKTCKNFLCLCSG |
| | | l | | | | EKGLGKTTGKKLCYKGSTFHR |
| | | l | | | | VVKNFMIQGGDFSEGNGKGGE |
| | | | | | | SIYGGYFKDENFILKHDRAFLLS |
| | | 1 | | | | MANRGKHTNGSQFFITTKPAPH |
| | | l | | | | LDGVHVVFGLVISGFEVIEQIEN |
| | | l | | | | LKTDAASRPYADVRVIDCGVL |
| | | | l | | | ATKSIKDVFEKKRKKPT |
| 4837 | 35205 | Α | 4878 | I | 1689 | |

| SEO ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | endon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 1 | | l | | sequence | | |
| 4838 | 35206 | Α | 4879 | II . | 1604 | MGISCPGSSKMLNSRALPVLKL |
| 4030 | 33200 | l^ | 4077 | , | 1004 | TQGALRDCKERANYTNFNIYK |
| İ | | 1 | | | | AVESQGKFVCVLYNGQQSPEY |
| | | 1 | | | | VMIPCTSVSPTGQEVPEDRGMR |
| | 1 | | | | | MVMKNKPNKPSKMOSLKSSKI |
| | | | | | | LTNSVIVIAVGIFFSVTLOARDP |
| | | | | | | QLDDAIEQLRGVCIRAWEKITS |
| | | | | | | GGEQYPSFSAIKQGPKEPYIDFI |
| | | | | | | ARLQESLKKMIADSAAQDIVLQ |
| | | l | | | | LLAFDNANPDCQAALRPIRGKA |
| 1 | | | | | | HLVDCIKACDDIGDGSSNGKAS |
| | | | | | | YFGSKSKVFQTSYTSAQKAELV |
| | | ŀ | | | | AVIEVLTAFDMPINVISDSSYM |
| | | 1 | | | | VYSTQLIENAQLRFHTDEQLMT |
| | | ŀ | | | | LFTQLQTAFRSTMHPFYITHIRA |
| 1 | | ŀ | | | | R\HTPLPGPLTEGNOMADCLVA |
| 1 | | ŀ | | | | NAISNARHFHNLTHVNASGLK |
| | | | | | | HRYSITWKEAKNIIQRCPTCOM |
| 1 | | | | | | VHSSSFRGGVNPRGLEPNSLWC |
| - | | | | | | MDVTHIPLEGRLAYVHKRRRIR |
| | l | | | | | GGGGGEGEGEGEGEEEEE |
| | | | | | | EEEEEEEEEEEEE |
| | | | | | | QEQEEQEQEQEQEERRRKDTE |
| | l | | | | | ELSYSLPLNRTQPCWHPDFGLP |
| 4839 | 35207 | Α | 4880 | 1 | 1146 | |
| 4840 | 35208 | Α | 4881 | 1 | 1577 | MGQVWALVHSTLETFHTDEEE |
| 1 | ŀ | | | | | GEYNEVTEQVCLPAKAGSAAV |
| | | | | | | DLCCTKAVSLLPGESPQKVPTG |
| | | | | | | AGGPLPAGMTGLLLGRSSLNIK |
| | | | | | | AVQVQTGVTDSDYNGEIQIVTS |
| | | 1 | | | | TSVPWKAKPGDHIAQLLIVPKK |
| | | l | | | | F\EGLKEPLQVERQSSCQGLGY/ |
| | | | | | | PFLMAAIVKPPEPIPLKWLTDKF |
| 1 | | | | | | IWTEQWPLSKEKLEALEDLITQ |
| 1 | | | | | | QLKKGHIAPTFSPWNSPVFIIKK |
| | | | | | | KSAEQDCEWFVFTILAVNNLQL |
| | | l | | | | KPAKRFHWKVLPQGPNQQPIW |
| | | | | | | PSRYLKPYHKPDAKEEIPEGSQ |
| | | | | | | GFPVAAMSRLTLRRTPTVTSNT |
| | | | | | | HRTQPPTWGQIEKLPQMAEENL |
| | | ŀ | | ' | 1 | RKAGQPVTISNWILPRITKFKPI |
| | | 1 | | | | EGAENVFTDGSSNGKASYSGSK |
| 1 | 1 | 1 | | | 1 | GPLTEGNQMADRLVAKVISNA |
| | | | | | | RHFHNLTHVNASGLKRRYSIT |
| | | 1 | | | | WKEAKAIIQRCPTCQVMLSAAE |
| | | 1 | | | | QHLQKSAAKTEAEKLVWWRD |
| 1 | | | | | 1 | PITKSREIGKIITWGRGYACVSP |
| 1 | | | l | | | |
| | | | | | | GPNQQPIWIPSKHLKPYHKPDA GEKISGGNCGPHPHPRLQPCPD |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /-possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide inscrtion) |
| | | | | sequence | | |
| 4841 | 35209 | A | 4882 | 1 | 420 | MTNISTTLKDLKDAGMIDPIKS |
| | | | | | | TFNL/PIWIPQKPDGSWKTTANN |
| | | | | | | /R/KLNQATISIAAIVLDVASLPG |
| | | | | 1 | | KARSYHGFSSHAGRVIDSNNOK |
| | | 1 | | 1 | | DIEGCTYILNVAGKNMFGIQLR |
| | | 1 | | ì | | RSVIFPCPNLMYTDNCSSHGPR |
| | | 1 | | | | GPSDYDSDP |
| 4842 | 35210 | A | 4883 | 213 | 687 | PEHILPGAQEGPSC/PLEPELE/V |
| | | 1 | | | | *NMSSWNTLSESCKMHGDLKY |
| | 1 | 1 | | | | LFVITAKDQQ/VSIAAST/*GFC |
| | | 1 | | 1 | | WNQ*VSASPSQAPGMPLVLGR |
| | | 1 | | | | RLWOGSRLGGLSISLSDDCHGA |
| | 1 | 1 | | | | HNHSFKRVTTTLQVFSWTVPO |
| | i | 1 | | | | AEPAMDCIHTA/DSPRQRLP*QA |
| | | 1 | | 1 | | HESVAEVIIT |
| 4843 | 35211 | A | 4884 | 1 | 648 | MSSWNPLPESFKKIIGYLLYLFV |
| | | | | | | ITAKDQQ/VSITASTWGFYWNH |
| | 1 | 1 | | | | SOGKNPEOMEASOKPVAGLWA |
| | | | | | | WWLNISLSAASHGAONHPFKR |
| | | 1 | | | | VTTTLQSQGWNKDLWIMRELL |
| | | 1 | | 1 | | CNNRPEOLLOETATIKAPIAPAD |
| | | 1 | | 1 | | PWSQEVIYNFCKAVSSVSCMPF |
| | | 1 | | 1 | | NIHFNSNIPPESSGDWRMQQPC |
| | | 1 | | | | KVEQSILGAQRGGGGCRPGSLR |
| 1 | | 1 | | | | ELFPCLLAEPNMEEEVAALRA |
| 4844 | 35212 | Α | 4885 | 3 | 597 | GTLEPAAEWSVLLGV\HSQDGP |
| | | 1 | | | | LDGAHTRAVAAIVVPANYSQV |
| | | | | | | ELGADLALLRLASPASLGPAV |
| | | | | | | WPVCLPRASHRFVHGTACWAT |
| | | | | | | GWGDVQEADPLPLPWVLQEVE |
| | | | | | | LRLLGEATCQCLYSQPGPFNLT |
| | | | | | | LQILPGMLCAGYPEGRRDTCQP |
| | | 1 | | | | SPEPGPMCIS/VSHIQRLRDAVS |
| | | 1 | | | | HTWQRGTEPARLGSWERRQRQ |
| | | | | | | QQQGPV |
| 4845 | 35213 | В | 4886 | 387 | 552 | |
| 4846 | 35214 | Α | 4887 | 20 | 612 | |
| 4847 | 35215 | Α | 4888 | 792 | 959 | TGLSSSQNPKATKSIPWHNRLL |
| | | | | | | PNVDSQVQQNSQAIIYTN*GNS |
| | | | | | | ESQYPFSKMDT |
| 4848 | 35216 | Α | 4889 | 268 | 500 | |
| 4849 | 35217 | Α | 4890 | 1 | 529 | |
| 4850 | 35218 | В | 4891 | 259 | 1672 | |
| 4851 | 35219 | Α | 4892 | 480 | 657 | |
| 4852 | 35220 | Λ | 4893 | 2 | 377 | WCDFSSSLHRSVQALRTFCVTL |
| | | 1 | | 1 | 1 | SGAFVRDCTTVLSSTTCEPSTD |
| | 1 | 1 | | | 1 | V/CWAMNIVTSVLLLYGSEEEA |
| | | 1 | | 1 | 1 | FWLLVALC\ERMLPDYYNTRV |
| | | 1 | | 1 | 1 | VVIRTYDQRYEQCVDLYDGLP |
| | | | | L | L | TTLFTTDDWHVWPDLTGLP |

| SEQ ID | SEQ ID NO: of peptide | Met | SEQ ID NO: in USSN | Nucleotide location of first | Nucleotide location of last codon for last amino acid | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide |
|--------|--------------------------|-----|-----------------------|---------------------------------|--|---|
| NO: | sequence | med | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 4853 | 35221 | IA | 4894 | 11 | 251 | I TEARKAAAVMPKTAVLAAERP |
| 14033 | 33221 | ľ` | 1071 | ľ | 120. | KKAWGVLIPKKSTKRTPKAFA |
| 1 | İ | | | | | GGGCW/TKVGWSKVAKKVPKF |
| | | 1 | | | | EASKPKKAAPKTRRYKSTLKTK |
| | | 1 | | | | |
| 4854 | 35222 | Α | 4895 | 283 | 427 | PSVSKESPLNSPASQAGSATFAT |
| | | 1 | | | | TPLTPPK/PAATSSVAAAALLPA |
| | | 1 | | | | LPR |
| 4855 | 35223 | Α | 4896 | 111 | 1095 | SRGWSRLPVPCCAPALLSPWAV |
| | | 1 | | | | NGIRRRGAGDGTRRGGSGCAG |
| | | | | | | AHSAGLVASGPESWIPGPVPPG |
| | | 1 | | | | AEPPRRGDSGLARCPAPGHPSR |
| | İ | 1 | | | | ASPQRPAEGFDALAAPSRVPGD |
| | | 1 | | 1 | | SRQLSRNNTRSRCEGRGGKTPP |
| | | 1 | | | | AWAGVHRHGPPPAAPPGRARV |
| | | 1 | | | 1 | HGHRLRGGLGPGGGKRGLPGC |
| | l | i | | 1 | | CPRAADPRGRP/GETSRSGERGP |
| | | 1 | | | | PGRSAPLSLQPRHRTGLET/RQP |
| | | 1 | | | | SPLARSRPGLGPRPSARRPSRPA |
| | | 1 | | | | PPPPPPELHRGAPQRGRVASQT |
| | | | | | | RPGARARPAADTHSSLKSPASQ |
| | | 1 | | | | AGSAAFATAPLTPQKPQLRAP |
| | | 1 | | | | WQPLHSFRPCRGVTSRLRTAPP |
| 4856 | 35224 | В | 4897 | 243 | 452 | |
| 4857 | 35225 | Α | 4898 | 3 | 353 | RRYLSPKYIKMFVLDEADEMLS |
| | 1 | | | | | RGFKDQIYDIFQKLNSNTQVVL |
| | ĺ | | | | | LSATMPSDVLEVTKKFMRDPIR |
| | ł | | | | | ILVKKEELTLEGIRQFYINVERE |
| | į. | ı | | | | EWKLDTLCD\LSAMHGDMDQK |
| | | | | | | ERDVIMR |
| 4858 | 35226 | Α | 4899 | 3 | 410 | NLQEWKLDTLCDLYETLTITQA |
| | | | | | | VIFINTRRKVDWLTEKMHARDF |
| | i | | | | | TVSAMVCLPAASLLWVCPSEV |
| | | | | | | SYLKPGFLEPRCLPGLLHICFLF |
| | 1 | 1 | | | | QHGDMDQKERDVIMREFRSGS |
| | | 1 | | | | SRVLITTDLLVSRGN**QRQKG |
| | | _ | | | | GSKVI |
| 4859 | 35227 | Α | 4900 | 1 | 235 | MLSYVLEVTKKFMRDPIWILVK |
| | | 1 | | | | KEELILESIHQFCINVEQEKWKL |
| | 1 | 1 | | | | DTLRDLYETLTITQA\VIFTNTR |
| | L | L | | L | | RKCCSKVREI |
| 4860 | 35228 | Α | 4901 | 3 | 48 | NSNVEREEWKLDTLCDLYETL |
| | | 1 | | | | TITQAVIFINTRRKVDWLTEKM |
| | 1 | 1 | | | | HARDFTVSAMHGDMDQKERD |
| 1 | | 1 | 1 | | 1 | VIMREFRSGSSRVLITTDLLVSR |
| | 1 | 1 | L | | | GN**QRGTRGVEAGHTM |

| SEQ ID NO: | SEQ ID NO: of peptide sequence | Met | SEQ ID NO: in USSN 09/540,217 | Nucleotide location of first codon for peptide sequence | Nucleotide location of last codon for last amino acid of peptide sequence | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
|---------------|--------------------------------------|-----|-------------------------------------|--|---|---|
| 4861 | 35229 | A | 4902 | 2 | 879 | AOFPTRLDLKATQALVLAPTRE LAQHIQKVVMALGDVMGASC HACIGGTNVARAEVQKLQMEAP HINGTFGRVFDMLNRRYLSPK YIKMFVLDEADEMLSRGFKDQ YDIFQKLNSNTQVVLLSATMPS DVLEVTKKFMRDPIRLVKKEE LTLEGIRQFVGVENEWKLDT LCDLVETLTITQAVIFINTRRKV DWLTEKMHARDFTVSAMHQD MDQKERDVIMREFRSGSSRVLI TTDLLARGIDVQVSLVINYQL TTDLLARGIDVQQVSLVINYQL |
| 4862 | 35230 | A | 4903 | 1 | 1764 | AINMYTEEDK MASLEEGIYSLKINSKRSSYNS MNROFTAGSEQONETEEPNKFC SRKGRPQDSGSLSLSVLQEILG DDIPKVKEEAVISSQSDLGECPY COERPARNATIFAPQKEKESAP EMSSSCDKRVTVNPPEKFSEGR PKTQNTLICEKCSQPSNFLDDY NPHVIQKRLSNQGRVICEKSSP PLNVPDNYNSHSVIGKHKEKM |
| | | | | | | AIERPSSGSDWSDVGGTTVIFSE EKPFSLCLPVSEPPYVATDYT TFPPHYSPWHDYTSSWFSSTKS SCYPSLGSSSNTLQAGKSSCSSS SRSNNNIFQGERSSHOGFLSDYS TSFPVSSENTSRDLKMTEEGRS KNSSLFYYSRNVEAEAKERVY QEETLGHPYGGRASSPPRTIW QPEQPGFIDTHCHLDLLYSRLPF |
| | | | | | | KGTETKFRKIYSNTFPKEFGGCI SCFCNPQNLSDNLWEDQLKDD LVWGVFGCRPHFAHYYNNYQE RSILKALRHPKAVAFGEMGLD YSSKCTTHIPEQQKVFKRLLRL AVSLKIKPMMIHCREADEDLLG ILKKYVPSDHKMYQHCFTGSYF VIKPLLSCFPNLYVGFMAILTYS SAEQARETVKK |

| SEO ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|----------|------------|-------------------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 4863 | 35231 | IA. | 4904 | 1125 | 820 | I VLAPNYHITFRNLSSVSSPVTSA |
| 4865 | 35231 | IA. | 4904 | 123 | 820 | |
| | | | | | | EPVLQAGQARELSFSSLHPASPL |
| | | | | | | LVPSTPALTLHAFNALVLFPSFP |
| | | 1 | | | i | LEKAAKRERPKSKIQITARVGK |
| ŀ | | 1 | | | | MRRTWSPHTTISAGGSVNGAST |
| | | | | | | LKNSLVWEAKPADTTNPTPPTT |
| | | 1 | | | | HPNPGPTPPTNTNRHPPPHHPLT |
| | | | | | | NTPAPPHQPPATTP/SPQTQTPN |
| | | | 1 | | | YCPNTDHTTPTHDTPNPVPPTR |
| | 1 | | 1 | | | RTPPNRTGKRTNTSQNYRLVSP |
| | | <u> </u> | | | | APKIHWEA |
| 4864 | 35232 | A | 4905 | 407 | 757 | OVER THE OWNER OF THE OWNER O |
| 4865 | 35233 | A | 4906 | 5 | 426 | GKTSTKSQNASSPPKDHNSSPA |
| | | | 1 | | | REQN/WIENEFNELTEVGFRRIT |
| | i | | 1 | | | SLEKNINDLMELKNTARELREA |
| | 1 | | 1 | | | YTSINSQINQVEERISEIEDQLNE |
| | | 1 | | | | IKHEDKIREKRMKRNQQSLQEI |
| | | | | | | WDYVKRPNLRLIGVPESDIENG |
| | | | | | | TKLENTL |
| 4866 | 35234 | A | 4907 | 1 | 2267 | MTGQFQDVVREEARPLPNRIM |
| | | | 1 | | | RLRFNHFATECSWDHLYVYDG |
| | 1 | | 1 | | | DSIYAPLVAAFRCEVENRYQGN |
| | | | | | | PLRGTCYYTLLIDYQFTFSLSQE |
| | | | l | | - | DDRYYTAINFVATPDEETPPIRG |
| | 1 | | | | | RQTAHTGELQLTSGGYPSGMK |
| | | | İ |] | | LPEEGTGERNRITINKKDVHTET |
| | | ı | l | | | PSKGHQHQRPKVDKSTKIKKN |
| | | | | | | QRKKAENSKNKNASSSPEDHN |
| | | | | l | | SSPAREQNWMENEFDELTEVG |
| | | 1 | | ľ | | FRRWVITNSSKLKKHVLTQCKE |
| | | 1 | | | | AKNLEKRLGQLLTRITSLEKNV |
| | | 1 | | | | KELMELKNKAQELCEAYTSINS |
| | | | | | | QIDQAEESISEIEDQLNEIKHED |
| | | 1 | | | | KIREKR\IKRNKQSLQEIWDYVK |
| | | | | | | RPNLRLIGVPESDGENGTKLEN |
| | | | | | | TLQDIVQDNFPSLARQANIQIQE |
| | i | l | | | | ILKTPQRYFSRRATPRNIIITFTK |
| | | | | • | | VEIKGKMLRAVREKDHSAIKLE |
| | | | | | | LRIKKLTQNCTTMWKLNNLLL |
| 1 | 1 | | | | | NEYWVHNEIKAEINKFFETNEK |
| 1 | 1 | 1 | | | | KDTTYQDLWDTAKAVFKGKFI |
| 1 | | | | | | ALNAHRRKWERSRIDTLTSQLK |
| 1 | 1 | | 1 | | | ELEKQEQTNSKASKRQEITKIR |
| 1 | 1 | | | | | AELKEIETQKTLQKINESRSWFF |
| 1 | 1 | | | | | EKINKIDRLLARPIKKKREKNOI |
| 1 | 1 | 1 | | | | DTIKNDKGDITTEPTEMQTTIRE |
| 1 | 1 | 1 | | | | YYKHLYANKLENLEEMDKFLD |
| 1 | | | | | | TYTLPRLNQEEVESLNRPTTSSE |
| | | 1 | | | | IEAIINSLPTKKSPGPDGFTAKL |
| | | 1 | | | | YQRYKEEVVPLLLKLFQTVGK |
| | | | | | | EGPLPNSFYWANIILIPKPGRHT |
| | 1 | 1 | l | | 1 | LOI DI NOI I WANTED KEGKITI |

| SEQ ID | | | SEQ ID NO: | | | Amino acid sequence (X=Unknown, |
|--------|------------|-----|-----------------------|--|--|---|
| NO: | of peptide | hod | in USSN 09/540,217 | location of first codon for peptide | codon for last amino acid of peptide sequence | *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
| | sequence | | 09/340,217 | sequence | or peptide sequence | determin, (-pussion macretion) |
| | | | | | | |
| 4867 | 35235 | С | 4908 | 605 | 760 | |
| 4868 | 35236 | Α | 4909 | 94 | 400 | |
| 4869 | 35237 | Α | 4910 | I | 1538 | MPIQMQYPQYKLVENKTQPPVI |
| 1 | | | | l | | YQYWPPADLQYRPPPEVKYRP |
| | | | | 1 | | QVVCPVPNSTAPYQQPTAVVF |
| | | ŀ | | | | NPTAPPSGQGIIAQNTDLVEWF |
| | | 1 | | | | FLPHSTIKTFTLYLDQMATLIGQ |
| | | | | | | ARLRIIKLCESDSDKIIVPLNKEQ |
| | | 1 | | | | VRQAFINSGAWQIGLADFVGII |
| | | 1 | | | | DNHYPKTKIFQFLKLTTWILPKI |
| | | | | | | TRHKPLENALTVFTDGSSNGKA |
| İ | | | | | | AYTRPKERLIETQYHWAQRAE |
| | | | | | | LVAVITVL\QDFNQSINIVSDSA |
| | | | | | | YVVQATKDVETALIKYSIDDQL |
| | | | | | | NQLFNMLQQTVRKRNFPFYVT |
| | | | | | | HIRAHTNLPEPLTKANEQVDLL |
| | | | ĺ | | | VSSAFLEAQELHALTHVNATGL |
| | | | į | | | KNKFDITWKQAKNIVQHYTQC |
| | 1 | | i | | | QIPHLPTQEAGVNPREQHFTGK |
| l | | | | | | KNSPHEGKLIWWKDKKNKTW |
| 1 | | | | | | EIGKVITWERGFACVSQGENQL |
| | | | | | | PGWIPTRNLKFYNEPLGDAKKS |
| | | 1 | | | | ASAETKNPQLSIIDSPGKAPGCL |
| | | | | j | | MPTTQNWLVEVPTVSATSKFT |
| | | | | | | YHMVYPPAPKRQRPARTGHND |
| | | | | | | DGSFVKKGDM |
| 4870 | 35238 | A | 4911 | 1 | 759 | FRMVIRCLPQRELDCDRGNWT |
| | | | | | | ATSAELTGIKWRRYNFGGHGD |
| | | | | | i | CGPIISVPAQDDPILLSFIRCLQA |
| | | | | | | NLLCVWRRDV*PDC*ELWIFW |
| | | 1 | | | | WGDEPNLVGV\YIMNCRLWKK |
| | 1 | | | | | DSGKMAFPMNVGRC/FFKAIHN |
| | ł | | | | | LLERCLMDKNFVRIGKWFVRP |
| | 1 | | | | | YEKDEKPVNKSEHLSCAF\TFFL |
| | | 1 | | | | \HGESNVCTSVEIAQHQPIYLIN |
| | | | | | | EEHIHMAQSSPAPFQVLVSPYG |
| | 1 | | | | | LNGTLTGQAYKMSDPATRKLIE |
| | | | | | | EWQYFYPMVLKKKKK |
| 4871 | 35239 | A | 4912 | Į I | 539 | MRHPCDGNSLYFDHISVNMLA |
| | 1 | 1 | | 1 | | VMLYYGFGRVSIGKTGLRGVQ |
| | | | | i | | RHLWPLPLDASSTKTVSSSHSD |
| | | | | | | KGEIFSPFPCSLINCNNFEMRNT |
| | 1 | 1 | l | 1 | | TKCLMDKNFVRIGKWFVRPYE |
| | | | 1 | | | KDEKPVNKRVTSQEIWLFDEY\ |
| | | | l | 1 | | GVSLPCFAVERCALLPLCLLPR |
| Ι. | 1 | | | 1 | | LMISISSTSRQPQYISRRGLKAKI |
| | | L | | | | swvv |
| 4872 | 35240 | A | 4913 | 198 | 620 | |

| SEQ ID | SEQ ID NO: | Mat | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | 1 | 1 | | sequence | | |
| | | _ | | 1 | | |
| 4873 | 35241 | A | 4914 | 63 | 1267 | RNRILRMEFFDWFWAFWSWLL |
| | | 1 | | | \ | NMIRSQNAKDSSSNSMENTDSP |
| | | ł | | | | WCELFRELCKINALDVPDSLLV |
| | | | | | | RGNEFSASVHNTFDHMWRTKE |
| | | | | | | RYEAGWLLLSSADRVMKENDE |
| | | 1 | | | | LRDSVSWLQKQILSLKSAKIAL |
| | | | | | | SGSLISYRERAEIVEKQTQTLIM |
| ì | | | | 1 | | RVADLQQKGYINSPALCHNLIW |
| | | | | l | | RDLDHFSFPYDITLFHYIDDIML |
| | | | | | | IGSSEQEVANTLDILKGQRFVLT |
| 1 | | | | l | | VIDTYSRYWFASPECNASA/KT |
| i | | İ | | | | TIHGFTECIIHYHGIPHSIASYQG |
| | | | | 1 | | THFMAEEPGW\SKNQGVEVTPF |
| | | ł | | 1 | | TITPSDPVATFLLPVPMTLRSAG |
| | | 1 | | | | LEVLVPEGGTLPPGDTTMIPLN |
| ŀ | | | | | | WMLRLPPGHFGLLLPLSQQAK |
| | | 1 | | | | KGVTVLAVVIDPDYQDEISLLF |
| | | l | | | | HNGAIISDGNGVILIGLLQWFST |
| 4874 | 35242 | Α | 4915 | 2 | 2210 | |
| 4875 | 35243 | Α | 4916 | 1 | 2036 | MDTFLDTYTLPRLNQEEVESLN |
| | | l | | | | RPITGAEIVAIINSLPTKKSPGPD |
| | | | | | | GFTAEFYQRYKEELVPFLLQLF |
| | | | | | | QSIEKEGILPNSFYEASIILIPKPG |
| | | | | | | RETTKKENFRPISLMNIDAKIVN |
| İ | | l | | | | KILAKRIQQHIKKLIHHDQVGFI |
| | | ļ | | | | PGMQGWLNTCKSINVIQHINRA |
| | | | | | | KDKNHMIISIDAEKAFDKIOOPF |
| 1 | | 1 | | | | MLKTLKKLGTDGTYFKIVRAIY |
| 1 | 1 | 1 | | | | DKPTANIILNGOKLEAFPLKTGT |
| 1 | | | | | | ROGCPLSPFLFNIVLEVLARAIR |
| ľ | | 1 | | | | QKEIKGIQLGKEEVILSLFADD |
| 1 | | 1 | | 1 | | MIVYLENPIVSAQNLLKLISNFS |
| | | 1 | | 1 | | KVSGYKTNVQKSQAFLYTNNI |
| | | | | | | QTGSQIMSDLPFTIASKRIKYLG |
| | | | | 1 | | IQLTRDMKDLFKNYKPLLTEM/ |
| | | | | 1 | | KTKKWKNIPCS/WELEKTTLKFI |
| ļ | | 1 | | l | | /WNRKRARIAKSILSQKNKAGG |
| | | | | l | | ITLPDFKLYYKATVTKTAWYW |
| | | | | | | DQNRDIDQWNRTEPSEITPHIY |
| | | | | | | NYLIFDKPEKNKOWGKESLFN |
| | | | | | | KWCWENWLAICRKLKLDPFLT |
| | | | | | | PYTKINSRWIKDLNLRPKTIKTL |
| | | | 1 | 1 | | EENLGITIQDIGMGKDFMSKTP |
| | | | 1 | | | KAMATQAKIDKWELIKLKSFCT |
| | | ı | 1 | 1 | | AKETIIRVNRQPTKWEKIFTTYS |
| | | l | | | | SDKGLISRIYNELKQIYKKKKQP |
| | | 1 | | | | HOKDFAYHFTVFVFYFGAFLLE |
| | | | | | | AAATSLHDLHCNTTITG/HATPE |
| | | | 1 | | | |
| | | | 1 | | | **PV*HKRSSLTITYLCRSG*IIW |
| 4976 | 26244 | - | 4017 | | 1250 | WCDPHTHS |
| 4876 | 35244 | Α | 4917 | I | 1359 | |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------------------|-----------------------------|---|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | l | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 4877 | 35245 | В | 4918 | 1 | 948 | |
| 4878 | 35246 | Α | 4919 | 1 | 981 | |
| 4879 | 35247 | Α | 4920 | 1 | 3747 | |
| 4880 | 35248 | Α | 4921 | 1 | 1875 | |
| 4881 | 35249 | Α | 4922 | 1 | 2238 | |
| 4882 | 35250 | Α | 4923 | 1 | 3924 | |
| 4883 | 35251 | Α | 4924 | 1 | 1068 | |
| 4884 | 35252 | В | 4925 | 62 | 389 | |
| 4885 | 35253 | В | 4926 | 1 | 3663 | |
| 4886 | 35254 | А | 4927 | 1 | 1474 | MAVSTTVRVDMPCCAVMLYC WGRSGKEQQPDEALKGKGFTV CFEGLRFGQKPGSYFSLDQIGH VEIQMITPPWRGTTLSTKRGGR KRGKTESDREHNLAPPKGRDTP |
| | | | | | | IKEGAHVRGGPLSCTPPTEKK GKARSPRYGDTHRGEGLNKTH RAPQNFSESRETTINKIDRPLAR LIKKKREKNQIDTINETPLAR LIKKKREKNQIDTINETPLAN NTEIQTTIREYYKHLYANKLE NLEETDKFLDTYTLPRLNQEEV ESLNPPITGSEGELAINSL PHTKKS PGTDGFTAKFYQRYKEELVPFL LKLFQSIEKEGLPNSFYEASILLI AKIVSKILANRIQVHIKKLIHIA AKIVSKILANRIQVHIKKLIHIA OKOFIPOMOGVOSSARAHIAO GKEIKCIOLGKEFAKLSLFADDTI ECLENPIVSAQNLFKLISNFSKY SYYKHYPKSVSFLYTNNIQAES QIKNAIPFTIASKRIKYJGQLT. |
| 4887 | 35255 | Α | 4928 | 419 | 1002 | CYQRWKVLKKSSGPLARL/IKK REKNQIDAIKNDKGDITIDTEI QTTIREYYKHLYINKLENLEET DKFLDTYTI.PRLNQEEVESLNR PITOSEIEAIINSLQTKKSPGPDG FTAKLYQRYKEELVIYRFNAIPI KLPMTFFTELEKTTLKFIWNQK RIRIAKSILSQKNKAGGITLPDF KLYYKATVIYTAWYW |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------------------|---------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | eodon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | eodon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 4888 | 35256 | A | 4929 | 11 | 2502 | MFFETNENKDTTYQNLWDTFK |
| · | | | | | | AVCRGKFIALNTHKRKQERSKI |
| ļ | | 1 | | | | DTLTSQLKEPEKQEQTHSKASR |
| ŀ | | | i | 1 | 1 | ROEITKIRAELKEIETOKTLOKIL |
| | | | | | | QKINESRSWFFEEINKIDRLLAR |
| 1 | 1 | | l | | | LIKKKREKNOIDAIKNDKGDITT |
| | | | | | | DRTEIQTTIREYYKHLYANKLE |
| | İ | | | | | NLEEMDKFLDTYNLPRLNQEE |
| | | | | | 1 | VESL\HRLITGSEIEAIINSLPTKK |
| İ | 1 | | | | | SPGPDGFTAKFYQRYKEELVPF |
| | l | l | | | | LLKLFQSIEKEGILPNSFYEANII |
| | | 1 | | | | LIPKPGTDTTKKENFRPISLMNI |
| | | | | | | DVKILNKILANRIQQQIKKLIHH |
| | | | ļ | | | DQVGFIPGMQGWFNIHKSINVI |
| | | | | l | | QHINRTKDKNHMIISIDAEKAF |
| | | | | | | DKIQQPFMLKSLNKLVLEVLAR |
| | | | | l | | AIRQEKEMKGIQLGKEEVKLSL |
| | | | | | | FADDMIVYLENPIISAQDLLKLI |
| | | | | | | SNFSKVSGYEINVQKSQASLYT |
| | | | | | | NNRQTESQIMSELPFTIASKRIK |
| | | | | 1 | | YLGIQLTRDVKDLFKENYKPLL |
| 1 | | | | | 1 | NEIKEDTNKWKNIPCSWVGRIN |
| | | | | | | IVKMAILPKVIYRFNAILIKLPM |
| | | | | l | | TFFTELEK\TTLKFIRNQKRACIA |
| | | | | | 1 | KSILSKKE\KAGGIMLPEFKL*Y |
| 1 | | | | l | | KATVTKTVWYWCQNRYIDQW |
| | | | | | l | NRTEPSEIIPHIYNHLIFDKPDKN |
| | | 1 | | l | | KKWGKDSLFNKWCWEHWLAI |
| | | | | | | CRKLKLDPFLTPYTKINSRWIK |
| 1 | | | | l | | DLNVRPKTIKTLAGHLGNTIRD |
| 1 | | | | | 1 | GLGKDFMTKTPKAMATKAKID |
| | | | | l | | KWDLIKLKSFCTAKETAIRVNR |
| 4889 | 35257 | Α | 4930 | 1 | 4187 | MGDFNTPLSTLDRSMRQKVNK |
| | | | | l | 1 | DSQELNSALHQADLTDICRTLH |
| 1 | | | | l | ł | PKSTEYTFFAAPHHTYSKIDHIV |
| i | | | | | | GSKALFSKCKRTEIITNCLSDHS |
| 1 | | 1 | | l | | AIKLELRIKKLTQNRSTTWKLN |
| 1 | | | | I | | NLLLNDYWVHNEMKAEIKMFF |
| 1 | 1 | 1 | | 1 | | ETNENKDTTYQNLWDTFKAVY |
| 1 | | | | | | RGKFIAFKAVCRGKFIALNAQN |
| | | | | I | | RKQERSKIDTLTSQLKELEKQE |
| | | | | | | QTHSKASRRQEITKIRAELKEIE |
| | | | | 1 | | TQKTLQK\ISESRSWFFEKTNKI |
| | | l | | 1 | | DRPLARLIKKKR |

| SEQ ID | SEQ ID NO: | | SEQ ID NO: | | | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------------------|---------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /-possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 4890 | 35258 | Α | 493 I | lı . | 1818 | MSSRGPCTLETLINPSPSVADDI |
| | | | | | | PHLRPKPVYITTTRDNENIYSTK |
| | | | | | 1 | IPYMAARVVFIKWIVTFFLEKK |
| | | | | | | YLTATONTKNGVDVLPKIIOTV |
| | | | | | | GGGAVOERAPELDGGGPTEOD |
| | | | | | | KSHSNSSTLSDRRLSNSSLCSIE |
| | | | | | l | EEHRMVYEMVORILLSTRGYV |
| | | | | | | NFVNEVFHOAFLLPSCEIAVTR |
| | | | | | | KVVQVYRKWILQDKPVFMEEP |
| | | | | • | | DRKDVAOEDAEKLGFSETDSK |
| | | | | | | EASSESSGHKRSSSWGTH\NSFT |
| | | | | | ' | SAMSRGCVTEEG/TIOMLKAGV |
| | | 1 | | | | OALLOPVLCVFPLIPLPPLCNOA |
| | | | | | | ARPAVVSIPLGDLLPWLSVLGG |
| | | 1 | | l | | PADQWHLSYLKPEGSSAYACIL |
| | | | | | | EALESAGKGLWKVSAVGRKP |
| | | | | | | WTRGRSDRKGTVGHQVQFLFF |
| | | 1 | | l | | KDEGRVDSRILTLMVAWIRPN\ |
| | | | | | | LCVYISRELWDDFLGVLS\SLTE |
| | 1 | | | | | WEELINEWANIMDSLTAVLAR |
| | | | | | | TVYGVEMTNLPLDKLSEQKEK |
| | | | | | | KORGKGCVLDPOKGTTVGRSF |
| | | | | ļ | | SLSWRSHPDVTEPMRFRSATTS |
| | | | | ! | | GAPGVEKARNIVRQKATAKRS |
| | | | | | | QSISNCVHLSEALPATKSVPLLL |
| | | | | ł | | HTLYKNKALKAALGQPVGKAD |
| | | | | 1 | | QLVVAGSPSVCCVEDQWGRSN |
| | | | | | | LEAMVLWLYCIPPDGDVLYL |
| 1891 | 35259 | С | 4932 | 96 | 278 | |
| 4892 | 35260 | Α | 4933 | 1 | 261 | KLRLPPGHFGLLLLLSQQAKKG |
| | | | | l | | VTVLAGVIDPDYHNEISLLLHN |
| | | 1 | İ | į. | | GGKKKTRPAEMLAEGKGNTE |
| | | | | | | WVGEEVSHQYQL*PHDQLQKR |
| 4893 | 35261 | С | 4934 | 36 | 385 | |
| 4894 | 35262 | Α | 4935 | 1 | 2349 | |
| 4895 | 35263 | Α | 4936 | 207 | 561 | QLAEPPHWIPGTRKDAQCLVGL |
| | | | 1 | ľ | | FGFWRQHIPHLGGLLWPIYRVT |
| | 1 | | | 1 | | QKAASFEWGPE*EKALQQIQPS |
| | 1 | l | | 1 | | VQAALPLGP*DLADPMVLEVS |
| | | | | 1 | | MADRCAGWSLWQAPIGELQQ |
| | 1 | 1 | 1 | | 1 | KPLGFWSKALP |

| SEQ ID | | | SEQ ID NO: | | | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------------------|---------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 4896 | 35264 | Α | 4937 | I | 1375 | MSTTQLDTMGAESLCNMETVQ |
| | | | | | | VEDEGIQKLKEIRMVEWITPFRP |
| | | | | | | THPSCEGPEDIPLTNALQNTFVR |
| | | ŀ | | | | AAPASLKSPVVALLLSPVGYRT |
| | | | | | | HAVVISPVPECRFGIDILSSWQN |
| | | l | | | | PHIGSLAGRAHQKQFVGSWQG |
| | | 1 | | | | QQYAFTVLPQGHINSLALCHNL |
| | | 1 | | | | IWRDLDHFLLSQGITLVHYTDD |
| | | ı | | | | IMLIGSNLADPMVLEVSMADRC |
| | Į. | 1 | | | | AGWSLWQAPIGELQQKPLGFW |
| | | 1 | | | | SKALPSSADNYSPFERQFFACY |
| | | l | | | | WALVETECLPTGHQLTMQPEL |
| ł | | l l | | | | PIMNWVLSDPSSHKWVHGQSG |
| | | l | | | | HGGRDSGYSWTQQHGLPLTKG |
| | ŀ | l | | | | DLSMTTAECQIFQQQRPILSPRY |
| | | | | | | GTIPWGDQPATWRQKWQRFVL |
| i | İ | 1 | | | | TGIDTYSRYEFAYPACHASTKT |
| | | 1 | | | | TIHGLMEFLIHHHGIPHSIASDQ |
| | | | | | | GTHLMAKEVRQWAHAHGIHW |
| | | ŀ | | | | SYHVPHHPEVAGLIERWNE\GL |
| | | | | | | LKSQLQHQLVNRLRRELQCWL |
| 4897 | 35265 | Α | 4938 | 1 | 324 | INCLRNCKTYQA/RKPLWFYNT |
| | | | | | | SLKFFLNKP/MLADVVFEIQGTT |
| | | | | 1 | | VPAHRAILV/ARCEVMAAMFN |
| | | | | 1 | | AGIFQAMCLLICAE/MYQVSRL |
| | | | 1 | [| | QHICELFII/TQLQSMPSRELASM |
| | | | | | | NL |

| SEQ ID | SEQ ID NO: | | | | | Amino acid sequence (X=Unknown, |
|--------|------------------------|-----|-----------------------|--|--|---|
| NO: | of peptide sequence | hod | in USSN 09/540,217 | location of first codon for peptide | codon for last amino acid of peptide sequence | *-Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
| | sequence | | 09/540,217 | sequence | or peptide sequence | deterion, (-possible fracteoride insertion) |
| | | | | | | |
| 4898 | 35266 | Α | 4939 | 108 | 2304 | VAAAYPPPASPPWSPARSLAGA |
| | 1 | | ŀ | | | APAPLCVGPAAVEAREGDAAG |
| | 1 | l | | | | DERIAGELAARGPREAVSRCFS |
| | | l | | | | PSRRPALGFEIMSIHIVALGNEG |
| | l | | | | | DTFHQDNRPSGLIRTYLGRSPL |
| | l | | | | | VSGDESSLLLNAASTVARPVFT |
| | | l | | | | EYQASAFGNVKLVVHDCPVW |
| | | | | | | DIFDSDWYTSRNLIGGADIIVIK |
| | | | | | | YNVNDKFSFHEVKDNYIPVIKR |
| | | | | | | ALNSVPVIIAAVGTRQNEELPC |
| | | l | | | | CPLCTSDRGSCVSTTEGIQLAKI |
| | | | ŀ | | | LGATYLELHSLDDFYIGKYFGG |
| | | 1 | | | | VLEYFMIQALNQKTSEKMKKR |
| | | | | | | KMSNSFHGIRPPQLEQPEKMPV |
| | | | | | | LKAEASHYNSDLNNLLFCCQC |
| | | | | | | VDVVFYNPDLKKVVEAHKIVL |
| | ļ. | | | | | CAVSHVFMLLFNVKSPTDIQDS |
| | | | | | | SIIRTTQDLFAINRDTAFPGASH |
| | | İ | | | | ESSGNPPLRVIVKDALFCSCLSD |
| | | | | | | ILRFIYSGAFQWEELEEDIRKKL |
| | | | | | | KDSGDVSNVIEKVKCILKTPGK |
| | į. | | | | | NCLRNCKTYQARKPLWFYNTS |
| | l l | | | | | LKFFLNKPMLADVVF\EIQGYG |
| | | | | l | | QCPAHRAIL\VAPCEVM\AAMF |
| | į į | | | | | NGNLHGKAKSVLIPVYGVSKET |
| | | | | 1 | | FLSFLEYLYTDSCCPA\GIFQAM |
| | | İ | | | | CLLICAEMYQVSRLQHICELFII |
| | 1 | | | | | TQLQSMPSRGTGHPWNLDIS/V |
| | | | | | | DLL*KGPSFHHSWIAFSTWAYF |
| | | | | 1 | | HFHCYLTYLIFQFKRPGIFRDLF |
| | | | | | | S/EGRNGSFLFGKRHRWGPSNM |
| | | | | | | LLGRQLAGITGKYYFTSPGNVG |
| 4899 | 35267 | В | 4940 | 1 | 3117 | |
| 4900 | 35268 | A | 4941 | 1 | 1162 | MRVCARACVRTRTRMCVYAH |
| | | | | | | TCVCVRTYAYVRVRVRVHVRA |
| | 1 | | | | | RVRVCAYARTRVRNSLSILPFIQ |
| | | | | | | LTLATPIHHIHQEEFNIRGIVPVL |
| | | | | | | RRVKPDLAIGIDITPSCDTPDLH |
| | 1 | l | | | | DYSEVRINQGVGITCLNYHGRG |
| | | i | | | İ | TLAGLITPPRLIRMLEQTALEHN |
| | | | | | | IPVQREVAPGVITETGYIQLFLP |
| | 1 | | | | | GWEIGFSPLALLLAFLCSTSPGF |
| | 1 | | | 1 | | GDPDGLGVIAYQDTVRPNAAT |
| | | | | 1 | | AISELNALAVKGVILTGDNPRA |
| | | | | | | AAAIAGELGLEFKAGLLPEDKV |
| | 1 | | | 1 | | KAVTELNQHAPLAMVGDGIND |
| | 1 | | l | | | APAMKAAAIGIAMGSGTDVAL |
| | 1 | | | | | ETADAALTHNHLRGLVQMIEL |
| | 1 | 1 | | | | ARATHANIRQNITIALGLKGIFL |
| | | | | | | VTTL\MTGLWLAVLADTGATV |
| | | | | | | |

| SEO ID | ISEO ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleatide location of last | Amino acid sequence (X=Unknown, |
|--------|-------------|-----|------------|-------------------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 4901 | 35269 | Α | 4942 | 1889 | 3387 | QWAIKQFKHAEKENPYLFGGG |
| | | l | | | | HLRAIFR*SGFQ*RQLHTMHWG |
| | 1 | l | | | | AS/QQAEHP/LAQPSTRAQLRTPI |
| | 1 | l | | | | P/TADS/QRALVGSGMKPRLNG |
| | ł | l | | | | ERVLICAAGKHPADAFTGLINE |
| | ì | l | | | | LESAGQTVVLVVRNDDVLGVI |
| | | 1 | | | | ALQDTLRADAATAISELNALGV |
| | | | | | | KGVILTGDNPRAAAAIAGELGL |
| | | l | | | | EFKAGLLPEDKVKAVTELNQH |
| | | | | | | APLAMVGDGINDAPAMKAAAI |
| | 1 | 1 | | | | GIAMGSGTDVALETADAALTH |
| | | l | | 1 | | NHLRGLVQMIELARATHANIRQ |
| | | | | ł | | NITIALGLKGIFLVTTLLGMTGL |
| | | ı | | | | WLAVLADTGATVLFFPRLFEAR |
| | 1 | 1 | | 1 | | NSQVGNGETNQTRFRLCAAPG |
| | 1 | | | | | GTFIADFTAGTGRRARPRRNRR |
| | | 1 | | | | RVVVSFDFHQNMRRFLMEIVA |
| | | 1 | | | | ARFVVSKVAAHFRTFHYGGVIF |
| | | 1 | | | | ISRENVIWRGFESIFDHLEQRFR |
| | | l | , | | | LLFTIDNPVGVKNFVAAVLGVR |
| | | l | | ł | | LGKHIQFDVVRVTTKLCESILQI |
| | | l | 1 | | | VNFIFROSOAKTOVSVDORLTA |
| ĺ | | | Ì | | | LPQQINAGNRSRLMVGKQLLCI |
| 4902 | 35270 | В | 4943 | 1 | 2104 | |
| 4903 | 35271 | С | 4944 | 1 | 1215 | |
| 4904 | 35272 | Α | 4945 | 3 | 268 | YEFNRPYPEIQRSGIS\KLLEPLL |
| l | | | | | | FAATSDSQLSKTEISSIKINSETV |
| i | | | | | | PVYQLRYNGNNALMFATYQD |
| | | | | | | KMLVFSSTDMLFKDDQQDTEA |
| 4905 | 35273 | В | 4946 | 1 | 1725 | |
| 4906 | 35274 | Α | 4947 | 1 | 1437 | |
| 4907 | 35275 | Α | 4948 | 2 | 736 | QCPYPYIAATGRILVVTHLICLA |
| i | | 1 | | | | PQIVENQVTYPLTTTMLSVPGA |
| | | ŀ | | | | KTVRGFSQFGDSYVYVIFEDGT |
| | | 1 | | | | DPYWARSRVLEYLNQVQGMLP |
| | | 1 | | | | AGVSAELGPDATGVGWIYEYA |
| | | ŀ | | | | LVDRSGKHDLADLRSLQDWIL |
| | | | | | | KYELETIPCVSEVASVGGVVKE |
| | | | | | | YQVVIDPQRLAQYGISLAEVKS |
| | | | | | | ALDASNQEAGGS\SI\ELAEAEY |
| | 1 | 1 | 1 | I | l | MGGTCSAHGRALSRGVLWCRF |
| | | 1 | | 1 | | SAIVRGPPRGMFCGAGAAPNLI |
| 4908 | 35276 | Α | 4949 | 531 | 632 | |
| 4909 | 35277 | Α | 4950 | 532 | 609 | |

| SEQ ID NO: | SEQ ID NO: of peptide sequence | Met hod | SEQ ID NO: in USSN 09/540,217 | Nucleotide location of first codon for peptide sequence | Nucleotide location of last codon for last amino acid of peptide sequence | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
|---------------|--------------------------------------|------------|-------------------------------------|--|---|---|
| 4910 | 35278 | A | 4951 | | 525 | LGVEATAUGDFGKWAEKLPVP VELAQACAHAVMKSGIDLAVS YCMQVNHGFAQPLEFLLGGLD KVPVLLVFINGWATPLPGFGRT RMLGEAIGRFTSTPQYAGDTVN DEDISNTIRALFATGNFEDVRVI RDGELRKFPTCESDDNFRPVTF SVNYVIRHDWYGIRRVYPENE |
| 491I | 35279 | Α | 4952 | 1 | 2769 | |
| 4912 | 35280 | Α | 4953 | 1 | 681 | |
| 4913 | 35281 | Α | 4954 | 1 | 1230 | |
| 4914 | 35282 | Α | 4955 | | 774 | MLKTSDRPPYOYPKRCIPLSVL EVLRCARRWSLRPYKQLARAY JERYKHDRIDIEREKKGRLNQEI RGLVEOTNASLLNENANKOSK AHERGDIHJYHDLDYSPFPMFN CMLIDLKGMLTQGFKMGNAEI EPPKSISTATAVTAQIGSVHIVO GTTINRIDEVLAPFVTASYNKH RKTAEEWNIPDAAGYANSRTIK ECYDAFQSLEYENVTLHTANV EGLTGDDGJAVEALKKNSQKPR MSASHNCELVSLRGRQYT |
| 4915 | 35283 | Α | 4956 | 1 | 1278 | |
| 4916 | 35284 | A | 4957 | 461 | 1002 | SLSTKGYAAAKWCSTACAGST LLLIVLLWVFIPKGFFPGQDNGI IGGTLQAPQSISFANMAQLORQ VADVILQDPAVQSLTSFVGVDG RVQKVIAKLHTAVDKVPGVDL FLQPTQDLTIDTQGSRTQYQFT LHATSLDALNTWVPQLMEKIQ QLPKLS |
| 4917 | 35285 | A | 4958 | I | 291 | MNPVDRPLLDIGLTRLEFLRISG KGLA\GLTIAPALLSLLGCKQED IDSGTVGLINTPKGVLVTQRAR CTGCHRCEISCTNFNDGSVGTF FSRIKPH |
| 4918 | 35286 | A | 4959 | 1 | 306 | MKNFEVLQPLQNSLSGLPLWV SERILQQINQLTHYEPVIGIMGK TGAGKSSLCNALFAGEVSPVSD VAGCTRDPLRFRLQIGEHFMTI VDL\PGVGESGVRD |
| 4919 | 35287 | Α | 4960 | 2666 | 2775 | |
| 4920 | 35288 | A | 4961 | 9 | 308 | GDLDGSRHRAFLCHLPVELKTA LMFPVTLTRALMETAY/ATAVS A/NFRTESRGAH/SRFDFPD/RDD ENWL/CHSLYLPESESMTRRSV NMNPKLRPAFPPKIRT |
| 4921 | 35289 | Α | 4962 | 1 | 1132 | |

| SEQ ID | SEQ ID NO: | | SEQ ID NO: | Nuclcotide | | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------------------|---------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *-Stop codon, /-possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 4922 | 35290 | A | 4963 | 1170 | 1352 | RNLPDAAGQSCAGEIRLYRQQ |
| | | | | | | QRSRLQRWLHLACFRRCNLHR |
| | | | | | | RELDATA*QHVRSCRWR |
| 4923 | 35291 | A | 4964 | 1 | 312 | MRKLTALFVASTLALGAANLA |
| | | | | | | HAADTTTAAPADAKPMMHHK |
| | | | | | | GKFGPHQDMMFKDLNLTDAQ |
| | | | | | | KQQIREIMKG\QRDQMKRPPLE |
| | | | | , | | ERRAMHDIIASDTFDKVKAEA |
| 4924 | 35292 | Α | 4965 | 3 | 205 | KDHIKGVLEAQNSLSTQVSLFF |
| | | | | | | *SFFG*NSNMRNLIQIYRSL/CTK |
| | | | | | | AI*LMNFKRHKNQLVINYLSRS |
| 4925 | 35293 | Α | 4966 | 1 | 915 | MTGVATARARGLRRPLSVGQV |
| | | | | | | PPFARLWKGVQTVERHMLANI |
| | ı | | | | | GTGSQHPGCGFQLINQNSVIVF |
| | | | | | | AAGEVNGFTSGDVQCLKMRSC |
| | | | | | | DMNDIQRRQRLLPDGNKFGEIQ |
| | i | | | | | TTIREYYKHLYANKLEDLEEM |
| | | | | 1 | | DKFLDTYTLPRLNQEEVESLNR |
| | | | | | | PITGSEIEAVVNSLPTKKSPGPE |
| | | | | | | RLTAEFYQRYKEELVPFLLKLF |
| | | | | l | | QTTEKEGLLPNSFYEASVLLIPK |
| | | | | 1 | | PGKDTTKKENFRPISLMNIDVK |
| | | | | l | | LNKILANRIQQHIKKLIHHNQV |
| | | | | | | GFIIGVQGWFNICKSTNVIYHV |
| | | | | | | NRTNDKNH\IISIDTEKAFD |
| 4926 | 35294 | Α | 4967 | 1 | 1338 | |

578

| SEO ID | SEO ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 1 | · . | | | sequence | | |
| 4927 | | Ļ | 4968 | ļ | 1928 | PPLVIHROTGSGEDLOOTPTDL |
| 4927 | 35295 | Α | 4968 | 11 | 1928 | |
| | | | | | | QLRVLTIRRKTNKQKGHPHQNP |
| | | 1 | | 1 | | ISSRRHEITKIRAELKETETQKTL |
| | | | | | | QKKSMNPRSWFF\ERINKIDRLL |
| | ļ. | 1 | 1 | | | ARLIKKKREKNQID\AIKNDK\W |
| | | | | i | | DITHRIPTEIETII\REY\YKHLYT |
| | | | | | | NKL\EN\LEEMDKFLDTYTLP\R |
| l | | | | 1 | | LN\QEEVESL\HRLITGSEIEAITN |
| l | | | | | | SLT\TKKSPGPDGF\T\AEFYQRY |
| | | | ŀ | | | KEELVPFLLKLFQSIEKEGILPNS |
| | | l | | | | F\YEASIILISKPGRDTTKKENFR |
| | | | | | | PISLMNIDAKILNKILANOIOOHI |
| | | | | | | KKLIHHHQVGFIPGMQGWFNIL |
| | | ı | | | | KSINVIHHINRTKOKNHMIISIEA |
| | | 1 | ŀ | | | EKAFDKIQQPFMLKTLNKLGID |
| | | l | | ļ. | | GTYLTYLKIIRAVYEKPTANIIL |
| İ | ŀ | | | ŀ | | |
| l | | | İ | | | NGQKLEAFPLKTGTRQGCPLSP |
| ł | | ŀ | | | | LLFNVVL\EVLVGAIRQEKEIKG |
| | | 1 | | ŀ | | IQLGKEDVKLSLFADDMIVYLE |
| | l | 1 | l | | | NPIVSAQNLLKLISNFSEVSGYK |
| l | | | | i | | INVQKSQAFLYTNNRQTESQIM |
| l | | | l | ŀ | | SELPFTIASKRIKYLGIQLTRDV |
| | l | l | | ļ. | | KDLFKENYKPLLNEIKEDTNK |
| | | | | | | WKNIPCSWIGRINIVKMAILPKT |
| | | l | | | | LNQKFSYWFRVNKHYIHQRTFP |
| ļ | | 1 | | | | LKETEFNTIATLYNGASP/RTAP |
| | | 1 | | | | KSTGTNGHQASGLPRF*RIAFCS |
| | l | | l | | | ALVKSKRKLYQGYLPGQTDRR |
| | | | | | | EEGVSWCPGGP |
| 4928 | 35296 | A | 4969 | 2 | 237 | OPVEDTWLSTPAAPMVDSLIAR |
| 1720 | | ' | | ſ | | VRVMARGNAITLPVCGRDVK/F |
| | i | | | | | TLEVLRGDSVEKTSRVW\SGIET |
| | | 1 | | | | YOELVTEDALDDL |
| 4929 | 35297 | A | 4970 | h | 1752 | TQEETTEDAEDDE |
| 4930 | 35298 | A | 4971 | 1 | 723 | |
| 4931 | 35299 | A | 4972 | ī | 1701 | |
| 4932 | 35300 | A | 4973 | 1 | 1446 | |
| 4933 | 35301 | A | 4974 | ī | 403 | MKLMETLNQCINAGHEMTKAI |
| 1 | | 1 | | ł | | AIAQFNDDSPEARKITRRWRIG |
| l | 1 | 1 | l | I | | EAADLVGVSSQAIRDAEKAGR |
| | | 1 | | 1 | | LPHPDMEIRGRVEORVGYTIEQI |
| 1 | l | 1 | l | I | | NHMRDVFGTRLRRAEDVFPPVI |
| | 1 | 1 | | l | | GVAAHKG\LALKGLRVLLVEV |
| | | l | | | | RHRV |
| 4934 | 25202 | - | 4975 | | 1374 | KIIKY |
| 4934 | 35302 | A | 149/3 | l' | 1374 | L |

| SEQ ID | ISEO ID NO- | Met | SEQ ID NO: | Nucleotide | Nucleatide location of last | Amino acid sequence (X=Unknown, |
|--------|-------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 4935 | 35303 | Α | 4976 | 11 | 2259 | MKLMETLNQCINAGHEMTKAI |
| | 1 | l . | | İ | | AIAOFNDDSPEARKITRRWRIG |
| | 1 | l | | | | EAADLVGVSSQAIRDAEKAGR |
| | 1 | | | | | LPHPDMEIRGRVEQRVGYTIEQI |
| | 1 | | | | | NHMRDVFGTRLRRAEDVFPPVI |
| | 1 | | | | | GVAAHKGGVYKTSVSVHLAQ |
| | | | | | | DLAL/KGLRVLLVEVHKRWS*N |
| | | | | | | DEGYRHCTV***\HPEARKITRR |
| | 1 | l | | | | WRIGEAADLVGVSSQAIRDAEK |
| | | | | | | AGRLPHPDMEIRGRVEOR\LVIO |
| | | 1 | | | | LNKLIICVMCLVRDCDVLKTYF |
| | l l | 1 | | | | HR*SGLLPIKVAFTKP/HVSVHL |
| | | 1 | | | | AQDLALKGLRVLLVEEPPSAPN |
| | ł | 1 | | | | LGIGTINVVCAADVLIVPTPAEL |
| | | 1 | | | | FDYTSALOFFDMLRDLLKNVD |
| | l | | | | | LKGFEPDVRILLTKYSNSNGSQ |
| | | | | | | SPWMEEOIRDAWGSMVLKNV |
| | 1 | | | l | | VRETDEVGKAAPMVDSLIARV |
| | | | | | | GVMARGNAITLPVCGRDVKFT |
| | | | | | | LEVLRGDSVEKTSRCDNLKTCH |
| | | | | | | TSHGSVMAETAVINHKKRKNS |
| | | | | | | PRIVOSNOLTEAAYSLSROOKR |
| | | | | | | MLYLFVDQIRKSDGTLQEHDGI |
| | i | | | | | CEIHVAKYAEIFGLTSAEASKDI |
| | 1 | | | | | RQALKSFAGKEVVFYRPEEDA |
| | | 1 | | | | GDEKGYESFPWFIKRAHSPSRG |
| | | | | | | LYSVHINPYLIPFFIGLQNRFTQF |
| i | 1 | | | | | RLSETKEITNPYAMRLYESLCO |
| | į. | | | | | YHPLTIEKVMKPLITSNTVTDEI |
| Ì | | | | | | ERANVFKMNGKWYLFTDSRGS |
| | | | | İ | | KMTIDGINSNDIYMLGYVSNSL |
| | | | | | | TGPYKPLNKTGLVLQMGLDPN |
| 4936 | 35304 | В | 4977 | 1 | 1744 | |
| 4937 | 35305 | A | 4978 | I | 2367 | |
| 4938 | 35306 | A | 4979 | 1 | 1215 | |
| 4939 | 35307 | A | 4980 | 1 | 946 | MKLMETLNQCINAGHEMTKAI |
| | i i | | | | 1 | AIAQFNDDSPEARKITRRWRIG |
| | | | | | | EAADLVGVSSQAIRDAEKAGR |
| | 1 | | | | | LPHPDMEIRGRVEQRVGYTIEQI |
| | 1 | | | | | NHMRDVFGTRLRRAEDVFPPVI |
| | | | | | | GVAAHKGGVYKTSVSVHLAQ |
| | į. | | | | | DLALKGLRVLLVEGNDPQGTA |
| | | 1 | | 1 | | SMYHGWVPDLHIHAEDTLLPF |
| | | | | | | YLGEKDDVTYAIKPTCWPGLDI |
| | 1 | 1 | | | | IPSCLALHRIETELMGKFDEGKL |
| | | | | | | PTDPHLMLRLAIETVAHDYDVI |
| | | [| l | | | VIDSAPNLGIGTINVVCAADVLI |
| | | 1 | 1 | | | VPTPAELFDYTSALQFFDMLRD |
| | | 1 | | | | LLKNVDLKGQAPCMK\LTMRS |
| | | | | | | SSSSAPSPWML |
| 4940 | 35308 | Α | 4981 | I | 1572 | |
| | | | | | | |

| SEQ ID | SEO ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | eodon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | eodon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 4941 | 35309 | Α | 4982 | T T | 1617 | |
| 4942 | 35310 | Α | 4983 | 1 | 550 | |
| 4943 | 35311 | A | 4984 | 1 | 3818 | |
| 4944 | 35312 | A | 4985 | 607 | 3777 | |
| 4945 | 35313 | Α | 4986 | 671 | 3091 | ARCQRVPGRPVPDLLRCLPRAT |
| | | | | | | TPAPSPAPGLVVRRLAAPVPAA |
| | | | l | | | APVPAAAPVPAAAPVPAAAPVF |
| | | | | | | AAAPVPAAAPVPVAAPVPVAA |
| | | | | | | PVPAAAPVPAAAPVPAAAPVPA |
| | | | | | | AAPVPAAAPVPVAAPVPAAAP |
| | | | | | | VPRFQSPNQTASTSDSPHIGQLP |
| | | | | | | HQTVPISDSFHTGQSPHRTDSTP |
| | | | | | | DSPHTGQLPHRTVPTPD/ELPHR |
| | | | | | | TVPTPDSFHTRQSPHQTASTPDS |
| | | | | | | PHIGQLPHQTVPISDSFHTRQSP |
| | | | | | | HQTASTQDSPHTGQIPHRTVPT |
| | | | | l | | PDSFHTRQSPYRTASTPDSPHIG |
| | | | | | | QLAHRTVPTPDSFHTGQSPHRT |
| | | | | | | DSTPDSPHTRQLPHQTVPISDSF |
| 1 1 | | | | | | HTGQSPYRTASTPDSPHTRQLP |
| | | | | | 1 | HQTASTPDSPHTRQSPHRTVPT |
| | | | | | | PDSSPHQTVSTPDSPHTRQLPH |
| | | | | | | QTVPTPDSFHTRQSPHQTVPTP |
| | | | | | | DSPHTRQLPHQTASTPDSP\TPD |
| | | | | | 1 | SPHTGQSPHQFPHQTVPTADSP |
| | | | | | 1 | HTRQLPHQTVPTADSPTPDSFH |
| | | | 1 | | | TRHSPHQTASTPDSPHIGQLPHR |
| | | | | | | TVPTPDSFHTRQSPHQTASTPDT |
| | | | | | | PHTRQLPQQTVPTADSPTPDSF |
| | | | | | | HTRQSPHQTVPTPDSPHTRQSP |
| | | | | | | HRTVPTPDSFHTRQYPQRTVPT\ |
| | | | | | | QTASTPGSPHTKQSPHQTVPTP |
| | | | | | | DCPHTGQSPYQTVSTPDSPHTR |
| | | | | | | HSPHQTASTPDSPHIGQLPHQT |
| | | | ļ | | | ASTLDSPHIGRHPRQMAPTPESP |
| | | | | | | HARQLPCQMAPTPDSPTLDGPH |
| | 35314 | В | 4987 | I | 891 | |
| | 35315 | Α | 4988 | 157 | 1990 | |
| | 35316 | В | 4989 | I | 2157 | |
| 4949 | 35317 | Α | 4990 | 1 | 378 | MSIKGTYLKVIKAIYDKPTASSI |
| | | | | l | | LNGENLKAFLLRTGTRQGCPLY |
| | | | | l | | KINVYKSVALLYTTNDQGENQI |
| | | | | l | | NNSTPYTTAPRKIKYIGIYLTKE |
| | | | | I | | VKDLYKENYKTLLKEVIDDT/R |
| | | | | | | WKHIPCSWMGRINIV |
| 4950 | 35318 | Α | 4991 | I | 392 | |

| SEQ ID | SEO ID NO: | Met | SEO ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|------|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | endnn for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | delction, \-possible nucleotide insertion) |
| | | | | sequence | | |
| 4951 | 35319 | A | 4992 | 3 | 1570 | ETDFAFVGQAGVQWCDLSSPO |
| 4931 | 33319 | ^ | 4992 | 3 | 1370 | PLPPWVQAILLPQPPRQGCWSG |
| | | | | | | IPKWSGISEDVQVWKNCKLDL |
| | | | | | | AAATGKNCLGQGEEALLTQMR |
| | | | l | | ł . | |
| | | l | | | | TGNQREVSDWWEEFVYLRSRN |
| | 1 | | | | | PLMVNSNYYMMDFLYVTPTPL |
| | | ı | 1 | | ĺ | QAARAGNAVHALLLYRHRLNR |
| | | 1 | | | | QEIPPVRGPQWVRDGGVVLWP |
| | | | | | | LGHVGPGRQLTAHGFLQTLLM |
| ļ | | i | | | İ | GMRPLCSAQYEKIFNTTRIPGV |
| | | | | | i | QKDYIRHLHDSQHVAVFHRGR |
| | | | | | | FFRMGTHSRNSLLSPRALEQQF |
| | | | | 1 | i | QRILDDPSPACPHEEHLAALTA |
| | | | | | | APRGTWAQVRTSLKTQAAEAL |
| | | ļ | l | ŀ | | EAVEGAAFFVSLDAEPA\GLTL |
| | | | l | | | EDPAASLDAYAHALLAGRGHD |
| | 1 | l | l | | | RWF\DK\SFTLIVFSNGKLGLSV |
| | | | | i | | EHSWADCPISGHMWEFTLATE |
| | | l | | | | CFOLGYSTDGHCKGHPDPTLPO |
| | | 1 | | | | PORLOWALPDHIHSSISLALRG |
| | | | | | | AKILSENVDCHVVPFSLFGKSFI |
| | | 1 | | | | RRCHLSLDSFIQIALQLAHFRDR |
| | | ł | | 1 | | GOFCLTYESAMTRLFLEGRTET |
| | | | | 1 | | VRSCTREACNFVRAMEDKKKT |
| 4952 | 35320 | A | 4993 | 1 | 1027 | MPAKSPGQDVLGTDNIKIDVFK |
| 4932 | 33320 | ^ | 4993 | ' | 1027 | QTNQKSHTGEKPYECPECGKAF |
| | | | | | ŀ | SEKSRLRKHORTHTGEKPYKC |
| | | | | | | |
| | | | | | | DGCDKAFSAKSGLRIHQRTHTG |
| 1 | | | | ì | | EKPFECHECGKSFNYKSILIVHQ |
| 1 | | | | | | RTHTGEKPFECNECGKSFSHMS |
| | | 1 | | | | GLRNHRRTHTGERPYKCDECG |
| | | | | | | KAFKLKSGLRKHHRTHTGEKP |
| | | l | | | | YKCNQCGKAFGQKS\QLRGHH |
| | | 1 | | | | RIHSGEKP\YKCNHCGEAFSQKS |
| | | l | | | | NLRVHHRTHTGEKPYQCEECG |
| | | 1 | | | | KTFRQKSNLRG\HQRTHSGEKP |
| | | l | | İ | | YECNECGKAFSEKSVLRKHQR |
| | | l | | | | THT\GEKP\YNCNQCGEAFSQKS |
| | | l | | ì | 1 | NLRVHQRTHTGEKPYKCDKCG |
| 1 | l | | 1 | 1 | | RTFSQKSSLREHQKAHPGD |
| 4953 | 35321 | A | 4994 | 154 | 331 | IPAAATCMGSLLGG*ETPGLWA |
| 1 | | | | | | RRSVKSRGLFPGLPSPSRASVRS |
| 1 | | 1 | l | I | | LLLLPAWAAFLEGIVDTRPTAW |
| 1 | | 1 | 1 | I | | RAFPWTLFLSVFCOFLDFPETSL |
| | | 1 | | | | DSQKLSLDTPSF |
| L | | ــــ | L | L | L | POVINGEDITO |

| SEQ ID | ISEO ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|-------------|-----|------------|-------------------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | delction, \=possible nucleotide inscrtion) |
| 4954 | 35322 | A | 4995 | 657 | 1455 | PEPKPAAVAPPPESPLPAGDSEG |
| | | | | | | CLQPGHLL\PASPRLPRPRQAAS |
| | | | | | | LAHRPEKSAPGADCPSGRR\GR |
| | | | | l | 1 | PWTCGGLSGPAAAPRPCPLAPA |
| | | | | | | FAPAFLALGAQR\GPGPEQGGH |
| | | | | į. | | ERQAERPGRRSRRTRAYSARIY |
| | | 1 | | l | | LPVAAEWPMGPGPEPGAGGRR |
| | | 1 | | | | RGEVPGPGAQRSPARRRRGGPA |
| 1 | | | | | | AVSSGGRGVGGLRGAVLFQHP |
| 1 | | | | | | EQQQRPVGLAGLGAQQPAHV |
| | | | | | | WRYGPLST/PPALGPPAAARGP\ |
| ļ | i i | | | | | GRRLFLPFSFSPSAGAPGAASRP |
| | | 1 | | | | SPRRSP |
| 4955 | 35323 | Α | 4996 | 1 | 415 | |
| 4956 | 35324 | В | 4997 | 8 | 211 | |
| 4957 | 35325 | Α | 4998 | I | 563 | MDPNHEEIPDLPEKEFRRVKSK |
| | | | | | | NHMTISIDAEKAFDNIQHRFMI |
| | İ | 1 | | | | KTLSKIGIQGTHFN\IIKAIYDKP |
| | | | | | | TASIILNGENLKAFPLRTGTSIVL |
| | | | | | | EVLARAIRREKEIKGIQIGKEEV |
| | | | | | | KLLLFADDMIVYLENPKDSYRK |
| | | | | | | LLEQIKEFSKVSRYKINVQKSIA |
| | 1 | | | | | LLYANSDQAENQINNPTSFTIA |
| | | _ | | | | AKNKIK |
| 4958 | 35326 | Α | 4999 | 667 | 960 | |
| 4959 | 35327 | A | 5000 | 317 | 1157 | EFRMDPAIALVLALSLTVPKLT |
| | | | | | | VPDSPLRLYRSFCTSACTSNLV |
| - | | ļ | | | | VHFA*KEKWPDV*LYTDSWAV |
| | | | | 1 | | ANGLAGWSGTWKKHDWKIDD |
| | | | | | | NEIWGRGMWIDLSEWSKTVKIF |
| | | | | l | | VSHESAHHIT*KSSAEEDFNNQ |
| | | | | | | VDRMIHSVDTTRPLSPATPVITQ |
| | | | 1 | 1 | | WAHEQSGHGDRDGGYAWAQQ |
| 1 | | | | | | HGLPLTKADLAMVTAECPICQQ |
| 1 | | 1 | | 1 | | QRPTLSP*YGTIPRGDQPATWW |
| 1 | 1 | | | 1 | | QVDYIGPLSSWKGQRFVLTGID/ |
| | | | | 1 | | TSGYEFAYPARSSANSTIRGLM |
| | L | _ | | | | ECLIHHHGIPHSIASNQLYS |
| 4960 | 35328 | Α | 5001 | 2 | 15246 | |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nuclcotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------------|----------------|----------------|------------|-------------------|-----------------------------|--|
| NO: | of peptide | | in USSN | location of first | codon for last amino acid | *-Stop codon, /-possible nuclcotide |
| l | sequence | 1 | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 4961 | 35329 | A | 5002 | i | 951 | MALALNRYL/CLAVLPLITKCA |
| ., | | | | | | PLFAG/TEHRAIMVDSMLHTVY |
| | | | | i | | R/LSRGRSLTKAQRDVIED/CLM |
| | | | | | | SLC\RLLRRLVFDVPILNEFA/K |
| Ì | | | | | | MPLKLLTNHYERCWKY/YCLPT |
| ŀ | | | | | | GWANFGVTSEEE/LHLTRKLFW |
| | | | | | | GIFDSLAH/KKY/DPELYRMAM |
| 1 | | | | | | PCLCAIAG/ALPPDYVDASYSSK |
| | } | | | | | AE/KKATVDAEGNFDPRPVET/L |
| ı | | | | | | NV/IIPEKLDSFINKFAEYT/HEK |
| | | | | | | WAFDK/DKEIYRWPIKESLKAM |
| | | 1 | | l | 1 | I/A WEWTIEKAREDLDPREGYN |
| | | | | | | PQPPDLSAV/TLSRELQAMAEQ |
| 1 | | 1 | | | | LAENYHN/TWGRKKKQELEAK |
| 1 | | 1 | | | | GGGTHPLLVP/YDTLTAKEKAR |
| | | 1 | | | | DREKAQSY |
| 4962 | 35330 | Α | 5003 | 273 | 478 | |
| 4963 | 35331 | A | 5004 | 2 | 622 | GAPRSESEKERQLMGMINQLSS |
| | | i | | | 1 | FREQLLHAHYEQKKLAASQIEK |
| | 1 | 1 | | | | QRQHMKLGKQ\QQEQIARQQQ |
| 1 | | | | | | RLIQQQHKINLLQQQIQQLYAA |
| | | ļ. | | | | QLAAMQVSPGGKLPGIPQGNL |
| į. | | | | | 1 | GAAVSPTSIHTDKSTNSPPPKSK |
| | | 1 | | | | TCCLLLWEDEHSASIPEVTNQQI |
| | | | | | 1 | HLHLASSITDHGGKVIWERCLE |
| 1 | l | 1 | | | | ESGKGVTGFPDWSPRWGRIPPE |
| | 0.000 | ١. | 5005 | | 512 | GSKEGFTKE |
| 4964 4965 | 35332 35333 | A | 5005 | 3 | 642 | MHAQTYAHTDTRAQPCTSMEK |
| 4965 | 33333 | I ^A | 3006 | 11 | 042 | QVSLKPTEEAHKKERKPQKPG |
| | 1 | 1 | | 1 | 1 | KYICQYCSRPC/AKPSVLQKHIR |
| | | 1 | | 1 | 1 | SHTGYG\CEMYPHGLEMERIPG |
| | | 1 | | | 1 | EEFEEPTEGESTDSEETSATSG |
| | | 1 | | | | HPAELSPRPKOPLLSSGLYSSGS |
| 1 | | 1 | | 1 | | HSSSHERCSLSQSSTAQSLEDPP |
| | | 1 | | | | PFVEPSSEHPLSHKPEDTHTIKO |
| | | 1 | | 1 | ì | KLALRLSERKKHQVIDRLGSGI |
| | | 1 | | | | LAGLSWOLLPOGEAL |
| 4966 | 35334 | A | 5007 | 341 | 1020 | TLNRRQGCCLGSWLTRSNGILL |
| 1 | 1 | 1 | [*** | F | | FEISRPTYLPILLILFLVKR/HKL |
| | | 1 | | | | KMSVLNMVVRHDPGSTESAKA |
| | | | | | 1 | KEELIFRCRSRHFRASPLFSQHA |
| | | 1 | | I | 1 | AADKHKFQRFLTADMALAVTV |
| | | 1 | | | | YAPTTFPPSSLLLFKOKSNGMH |
| | | İ | | | · | NLIATGHLLLVDPNRMVIKRVV |
| 1 | | 1 | | | | LSDPPFKICTKMAVVCYMFFNR |
| | 1 | 1 | | 1 | | EDVOWFKPVELRTKWSRRGHI |
| | | 1 | | İ | | QEPSGTHGRMKCSFDRKLKSQ |
| | 1 | 1 | | | | NTELMNLYK |
| | | | | | J | 1 |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 4967 | 35335 | Α | 5008 | 1 | 847 | EKAQALEDLAGFKDPAPGHTE |
| | | ļ | | | | ESMTHDKTTKIPCKSPPELVDT |
| | | | | | | ATSSKKWPRACGOKVEVKEEL |
| | 1 | | | | | LAVGKLTOTSGETTHTNKEPEC |
| | l l | l | | | | EGKGMKAFKQPAKQKLDPEN\ |
| | | l | | | | TGSRRLPRVPKEKAOPLEDLAS |
| | | l | | | 1 | FQELSQTPGHTEELANGADSFT |
| | | ŀ | | | | SAPKOAPDSGKPLKISRRVLOA |
| | | | | | | PKVEPVGDLVGTR/D/PVKSOSK |
| | | | | | | SNTSLPPLPFKRGCGKDGSVTG |
| | l . | l | | | | TKRPHCMPAPEEIIEELPASKKO |
| | | | | | | R/VVAPRVRGKSPEPLVIMKRSI |
| | | | | | | RTSAKRIEPAEDLNSNNMKTNN |
| 4968 | 35336 | A | 5009 | 9 | 1094 | IRHEEESMTDDKTTIIPCKSSPEL |
| | 1 | | | | | EDTATSSKRRPRTRAOKVEVKE |
| | | | | | | ELLAVGKLTQTSGESTHTDKEP |
| | 1 | l | | | l . | VGEGK\GTKAFKQPAKRKLDA |
| | 1 | | | | | EDVIGSRROPRAPKEKAQPLED |
| | | | | | | LASFOELSOTPGHTEELANGAA |
| | | l | | | | DSFTSAPKQTPDSGKPLKISRRV |
| | L | l | | | | LRAPKVEPVGDVVSTRDPVKS |
| | ł | İ | | | | OSKSNTSLPPLPFKRGGGKDGS |
| | | | | | | VTGT\KRLRCMPAPEEIVEELPT |
| | ŀ | 1 | | | | SKKORV\APRARGKSSEPVVIM |
| | ļ. | l | | | | K\RSL\RTSAKRIEPAEELNSND |
| | | l | | | | MKTNKEEHKLODSVPENKGISL |
| | | l | | | | RSRRONKTEAEQQITEVFVLAE |
| ì | | i | | | | RIEINRNEKKPMKTSPEMDIONE |
| | | İ | | | | DDGARKPIPRDKVTENKRCLRS |
| | 1 | | | | | ARQNESSQP |
| 4969 | 35337 | A | 5010 | 1 | 459 | MAKPWRALCILLRSLDSFLOLS |
| | | | | 1 | | ASLTCFGFMHNTYKNRPWGVL |
| | | l | | | | RSSTERSPRKGTAGDMRAGGRI |
| | i | l | | | | NAPLIGODLLFKEHFASKALDT |
| | | | | | | CTNIARSAKTQGGPVAAILLLL |
| | | l | | | | AFGPCIFNLRVKFVSSRIKAIKL |
| | | l | | 1 | | QM/RLTIYRGPLDRPAGPSTGL |
| 4970 | 35338 | В | 5011 | 1 | 687 | |
| 4971 | 35339 | С | 5012 | 194 | 418 | |
| 4972 | 35340 | Α | 5013 | 17 | 396 | |
| 4973 | 35341 | A | 5014 | 1 | 70 | |
| | | | | | | |

| SEQ ID | SEQ ID NO: | | SEQ ID NO: | | Nucleotide location of last | |
|--------|------------|----------|------------|-------------------------------|-----------------------------|---|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | <u> </u> | <u> </u> | | | |
| 4974 | 35342 | Α | 5015 | 1 | 994 | MGFVKVVKNKAYFKRYQVKF |
| | | 1 | | | | RRRREGKTDYYARKRLVIQDK |
| | | | | | | NKYNTPKYRMIVRVTNRD\IICQ |
| | | | | | İ | IAYARIEGIMIVCAAYAPELPK\ |
| | | 1 | | | | YGVK\VGLTNYAAA\YCTGLLA |
| | | | | | | GPAGFFHRFGMDKFYEG\QVEV |
| | | | | | | TGDEYNVESIDGQPGCLHPAY |
| | | 1 | | | | WDARPLPRTSPLAIKVFWLP*R |
| İ | ì | 1 | | | | GA\VDGGLVLFPPQYPNRFPWL |
| | | | | | | WIPESQGNLNARRYHREGTIHG |
| | 1 | | | | | PRIVAGLHAPTLMEEDEDA\YK |
| | | | | | | KQFVRQYVKNS\VTPD\MMEE |
| | | | | | | MYKKAHAAIR\ENPVYEKKPK |
| | 1 | | | l | | KEV\KRKRWNR\PKMSLAQKK |
| | | | | | | DRVAQKKASPL\RAQERAAEKL |
| | | _ | | | | NQTIFYKDFSDIAN |
| 4975 | 35343 | С | 5016 | 27 | 308 | |
| 4976 | 35344 | C | 5017 | 68 | 307 | |
| 4977 | 35345 | A | 5018 | 388 | 1485 | DDD1411 L KMCOCUDEL (D)DD1 |
| 4978 | 35346 | Α | 5019 | 3 | 1940 | RDRMILLKMEQEIIDFIADNNN |
| | | 1 | | | | HYKKFPQMSSYQRMLVHRVA |
| | | | | | | AYFGLDHNVDQTGKSVIINKTS |
| | | | | | | STRIPEQRFCEHLKDEKGEESQ |
| | | | | | | KRFILKRDNSSIDKEDNQSVCS |
| | | | | | | QESLFVENSRLLEDSNICNETYK |
| | | | | | | KRQLFRGNRDGSGRTSGSRQSS |
| | | | | | | SENELKWSDHQRAWSSTDSDS |
| | | | | | | SNRNLKPAMTKTASFGGITVLT RGDSTSSTRSTGKLSKAGSESSS |
| | | | | | | |
| | | | | | | SAGSSGSLSRTHPPLQSTPLVAG |
| | | | | | | VAAGSPGCVP\YPENGIGGQVA |
| | | | | | | PSSTSYILLPLEAATGIPPGSILL NPHTGOPFVNPDGTPAIYNPPTS |
| | | | | | | QQPLRSAMVGQSQQQPPQQQP |
| | | | | | | SPOPOOOVOPPOPOMAGPLVT |
| | | | | | | |
| | | | | | | QSIPAKKELNAFRVRNQEQRDT GTLHEGSGKISRMVLGWEPLSP |
| | | 1 | | | | |
| | | | | | | YAPDRDDVATQFGQMTLSRQS |
| | | | | | | SGETPEPPSGPVYPSSLMPQPAQ |
| | | | | | | QPSYVIASTGQQLPTGGFSGSGP |
| | | | | | 1 | PISQQVLQPPPSPQGFVQQPPPA |
| [| | 1 | | 1 | | QMPVYYYPSGQYPTSTTQQYR |
| | | | | I | 1 | PMAPVQYNAQRSQQMPQAAQ |
| | | 1 | | 1 | 1 | QAVLEVLSPLVSTVMPPKLAVL |
| | | | | | 1 | VMAGFRLRLELSESVLLQALW |
| | | | | 1 | 1 | WSDHLSSFSELLCRLPDVLPEPS |
| | | 1 | 1 | | 1 | LLPLEYDHQKDAQGQDYLTCM |
| 1 | 1 | 1 | 1 | 1 | 1 | VLVTLLLESPTGIQEDDSNEISVI |

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| SEQ ID | SEQ ID NO: | | SEQ ID NO: | Nucleotide | | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------------------|---------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | coden for last amino acid | |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | Sequence | | |
| 4979 | 35347 | Α | 5020 | 3 | 1353 | GDAYALVLRVTLYCGKCH\NE |
| | | | | | | VVLAPIFEILSTESIQDQLPYSV |
| | | | | i | | MLMSMLAITEGRRSFSVSVENA |
| İ | | | | | | CSNYVTTVQVKEVNQMHISPN |
| | | | | | | SCNAIHPRDHILEISGTPTHTLQ |
| | | | | | | VEELEDAISQMSQTLLLLIEHDF |
| l | | | | | | VSRSPAQLRLDAWLSPHTQNA |
| | | | | | | GHPHALSTLDTKDNLEGTLRRC |
| | | 1 | | | | SLRLSNSISKSPSPSSPKEPLLLS |
| | | | | | | RDISCWESLCCSSTYSKQNFRSC |
| | | | | | | DLIHGEVLGKGFFGQAIKVTHK |
| | | | | | | ATGKVLVMKELMRCDEENQK |
| | | | | | | TFLTEVKVTLPSNLLPPGHDLL |
| | | | | | | QTGAREQTGILKTGGLSVPGGA |
| | ľ | | | | | GHPAACRAGGVGPHCEHAVRP |
| | | | | | | DPRLTPLALAQPPAGGCSTASIA |
| 1 | | | | i | | PLFSIPAVSRVFRASRGLAACLE |
| | | | | | | AEQAGRTILTCEVCKLVVGLSL |
| | | | | l | | DSQQQLSSVLCGWLCLSCPQL |
| İ | | | | | | WSLNRHPQHQHHLVEMQNLKS |
| | | | | | | HPRPGETESAL |
| 4980 | 35348 | Α | 5021 | I | 588 | MEYPDGGSTLDLLEPGPLDETQ |
| | | | | | | IITILREILKGLDYLHSEKKIHRG |
| | 1 | | | | | VKAANVLLSEHCEVKLVDFGM |
| | | | | | | AGQLADTQTKRNTFVGTPFWI |
| | | | | | | APENNPPTLEENYSKPLKEFVE |
| | | | | | | ACLNKELSFRPTAKELLKHKFIL |
| | | | | | | RDTKKTSYLTELIDRYKRWRA |
| | | | | | | KQSQEDSSSEDSNSETDGQDS\G |
| | | | | | | GSDSGDWIFTIQEKDPKNL |
| 4981 | 35349 | Α | 5022 | <u> </u> | 1380 | GPRASPPRADRRGPAVPSQEVA |
| | | | | İ | | VLSAMAHSPVQSGLPGMQNLK |
| | | | | | | ADPEELFTKLEKIGKGSFGEVF |
| | | 1 | | l | | KGIDNRTQKVVAIKIIDLEEAED |
| | | 1 | | | | EIEDIQQEITVLSQCDSPYVTKY |
| | | | | l | | YGSYLKDTKLWIIMEYLGGGS |
| | | | | | | ALDLLEPGPLDETQIATILREILK |
| | | | | | | GLDYLHSEKKIHRDIKAANVLL |
| | | | | 1 | | SEHGEVKLADFGVAGQLTDTQI |
| | | | | | | KRNTFVGTPFWMV\PEVIKQAG |
| | | | | | İ | YDSKADIWSLGITAIELARGEPP |
| į | | | | | | HSELHPMKVLFLIPKNNPPTLE |
| | | | | | | GNYSKPLKEFVEACLNKEPSFIP |
| | | 1 | | 1 | | TAKELLKHKFILRNAK\KTSYLT |
| | | | | | | ELIDRYK\RWKAEQSHDDSSSE\ |
| | | 1 | | 1 | | DSDAE\TDGQASGGSDSGDWIF |
| | | | | | | TIREKDPKNLENGALQPSDLDR |
| | | 1 | 1 | | | NKMKDIPKRPFSQWLSTIISPLF |
| | | 1 | 1 | 1 | | AELKEKSQ\ACGGELGGPLKEL |
| | | 1 | 1 | l | | RGAIYLAEEACPGISDTMVAQL |
| | 1 | 1 | 1 | | | VQRLQRYSLSGGGTSSH |

| SEQ ID NO: | SEQ ID NO: of peptide sequence | | SEQ ID NO: in USSN 09/540,217 | Nucleotide location of first codon for peptide sequence | Nucleotide location of last codon for last amino acid of peptide sequence | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
|---------------|--------------------------------------|---|-------------------------------------|--|---|---|
| 4982 | 35350 | Α | 5023 | I | 346 | MAGEKVEKPDTKEKKPEAKKA DAGGKVQEGTGRYSRSAMYSR KAMYKRKYSAAKSKIEKKKEK VLATVTKPVGDKNGGTQVF\ QIITYSSYTQKVQLPKSTLKQRQ GPCPOGAL |
| 4983 | 35351 | Α | 5024 | 67 | 599 | SAAKSEMAGEKVEKPDTKEKK PEAKKVDAGGKVKKONLKAK KPKGKPHCSENPYLVRGIGRY SRSAMYSRKAMYKIRKYSAAK SKVEKKKKEKVLRNLQNOVG GDKINGGTRVGLNFRKMPRIY PTEQDYRKLLSHGQKNPFSQH V/REKLRASITPGTILIILTGRHR GKRVYEIN |
| 4984 | 35352 | Α | 5025 | 101 | 202 | PVPGTSSCTDRYHYKKH**KIN TKLVSKYILNM |
| 4985 | 35353 | А | 5026 | 2 | 562 | LRTYPDLEGRRFFAMRTGGRF- PELPPDMNSLEQAEDLKAFERR LTEYJHCLQPATGRWRMLLIVV SVCTATGA WNWLIDPETOKVS FFTSLWNHPFFTISCITLIGLFFA GIHKRVVAPSIIAARCRTVLAEY NMSCDDTGKLILKPRPHVQ*OS SLIVMGLRIAFLRISDTAKSHKG FLLRLDM |

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| NO: of peptide sequence od n USS) odos for peptide sequence of peptide sequence of peptide of peptide sequence of peptide of peptide odos for peptide od | nown, |
|---|-----------|
| | |
| TRRRATVSTHOEFVVI GLVVSGCLDADTAMP FQWQSQDGQKDIEDEI VDSCIRSLQESGILDPO RVHFIGKTLGLSSEDYY QMVKEVTVTPQVSVL ASALCQEGHDDPLI TGNHYIKDNSLPFWW QSALQNSKPEGSFQV NQTLALGETTESQLPA ATQQSFSQGTTSRAGH APPPPPPPREPFAPSLGI APPAAAAALYYSSSI GGSPLAAPQGGSPTKL PEGATYAAPRGSSPKQ KSYSTSSPINIVVSSAG SSPTVOSTISSSPHQLS ATLSFTKRLVHASEGY LYATATLQRFOSLAAC SQHGHLGPELRAGU YEDRVYQKPMSSLS LPPAHTGTYRTSTARS VPLQRTGSQHGPQNA RASYAAGPASNYADP CSVESPYSKSGPALP SPSIDSIGKDFSKYPIL CALVYPSSERASSL Q*NRLYPKFRVLGSG RRFCASKGIKGRFCGS: EHGGQHPCYPKLVPTI REGNQKNSERV 4987 35355 A 5028 123 3825 | mscrtion) |
| GLVVSGCLDADTAMP FQWQQDGQKDIEDE VDSCIRSLQESGILDPQ RVIHFGKTLGLSSEDY: QMVKEVTVTPQVXLL ASALCGQEGHDDPLLI TGNHYIKDNSLFPWWY QSALQLNSKPGSFQV NQTLALGETTFSQLPA ATGQFSQGTTSLA APPAAAAAALYYSSST GGSPLAAPQGGSPTKL PEGATYAAPGGSFTKL PEGATYAAPGGSFTKL PEGATYAAPGGSFTKL PEGATYAAPGSSPKQ KSYSTSSPINIVSSAG SPPTVQSTSSSPHQLS ATLSPTKRLVHASEQY LYATATLQRPGSLAA SQHGHLGPELRALQSP YEDRVYQKPPMRSLS LPPAHTGTYRTSTAPS VPLQRTGSQHGPCVRPMSLS LPPAHTGTYRTSTAPS VPLQRTGSQHGPCVRPMSLS LPPAHTGTYRTSTAPS VPLQRTGSQHGPCVRPMSLS CALVYPPSSERASCH SPSIDSIGKDFSKYPILC CALVYPPSSERASCH CALVYPPSSERASCH GRASKGIKGRFCGS RFCASKGIKGRFCGS RFCASKGIKGRFCGS CHGGQHPCYPKLVPTI REGNQKNSERV 4987 35355 A 5028 123 3825 4988 35356 A 5029 1 593 MQVCSSGRILRVSGT EGGRPCLGRQVNLURE APPTAPSLTALPPDIVD | |
| PQWQSQDQGKDIEDEI VDSCIRSLQESGILDPQ RVIHFGKTLGLSSEDY QMVKEVTVTPQVSVL ASALCQEGHDDPLLI TGNHYIKDNSLFPWVP QSALQINSKPEGSFQV QMTLALGETTPSQLPA ATGQSFSQGTTSRAGH APPPAAAAALYYSSSI GGSPLAAPQGGSTFIKLE EGATYAAPRGSSPKQ KSYSTSSPINIVVSSAG SPPTVQSTISSSPIHQLS ATLSPTKRLVHASEQY LYATATLQPTGSLSAG SPPTVQSTISSSPIHQLS ATLSPTKRLVHASEQY LYATATLQPTGSLSAG SPPTVQSTISSSPIHQLS ATLSPTKRLVHASEQY LYATATLQPTGSLSAG SPPTVQSTISSSPIHQLS ATLSPTKRLVHASEQY LYATATLQPTGSLSAG SPPTVQSTISSSPIHQLS ATLSPTKRLVHASEQY LYATATLQPTGSLSAG SPPTVQSTISSSPIHQLS ATLSPTKRLVHASEQY LYATATLQPTGSTISSSPIHQLS ATLSPTKRLVHASEQY LYATATLQPTGSTISSSPIHQLS ATLSPTKRLVHASEQY LYATATLQPTGSTISSSPIHQLS ATLSPTKRLVHASEQY LYATATLQPTGSTISSSPIHQLS ATLSPTKRLVHASEQY LYATATLQPTGSTISSSPIHQLS ATLSPTKRLVHASEQY LYATATLQPTGSTISSSPIHQLS ATLSPTKRLVHASEQY ATL | VSPFSL |
| VDSCIRSLQESGILDPQ RVIHFGKTLGSSEDY: QMVKEVTVTPQVSVL ASALCGQEGHDPDLI TGNHYIKDNSLPPWV QSALQLNSKPEGSFQV NQTLALGETTPSQLPA ATQQSPSQGTTSRAGH APPPPPPREPF APSLGST GGSPLAAPQGGSPTKL PEGATYAPRGSSPKQ KSYSTSSPINIVVSSAG SPPTVQSTTSSSPHQLS ATLSPTKRLVHASEQY LYATATLQRGSLAGA SPHORPSSERAGA SQHGHLGPELRALGS YERRAGASSPKQ KSYSTSSPINIVSSAG SPPTVQSTTSSSPHQLS LYATATLQRGSLAGA SQHGHGPERALAGS YERRAGASSPKQ LYATATLQRGSLAGA SQHGHGPERALAGS YERRAGASSPKQ LYATATLQRGSLAGA SQHGHGPERALAGS YERRAGASSPKQPL PESPSSKSQHAP CSVESPYSKSQHAP PSSIDSIGKDFSKYPLC CALVYPESSERASU Q*NRLYPKFRRVLGSG RRFCASKGIKGRFCCSS EHGGQHEVYPKLVFTI REGNQKNSERV 4987 35355 A 5028 123 3825 MQVCSSGGRILRVSGT EGGRFCLAGRGYRNLER EGGRFCLAGRGYRNLER EGGRFCLAGRGYRNLER EGGRFCLAGRGYRNLER EGGRFCLAGRGRRCSS EHGGQHEVYPKLVFTI REGNQKNSERV | GSAEEQ |
| RVIHFGKTT.GLSSEDY. | TTGLE |
| QMVKEVTVTPQVSVL ASALCQGEGHDDPLI TGNHYIKDNSLPWW QSALQNSKPEGSFQV NQTLALGETTRSQLPA ATGQSFSQGTTSR AGH APPPPPPREPF APSLG APPAAAAALYYSST GGSPLAAPQGGSPTKL PEGATYAAPRGSSPKQ KSYSTSSPINIVVSSAG SPPTVQSTISSSPIHQLS ATLSPTKRLWHASEGY LYATATLQRFOSLAAC SQHGHLGPELRACH SQHGHLGPELRA | DYSTGE |
| ASALCQGGHDDPLLI | SIMEKG |
| TGNHYIKIDNSLPPWV9 QSALQLNSKPEGSFQV QSALQLNSKPEGSFQV QVTLALGETTPSQLPA ATGQSFSQGTTSRAGH APPPAPAAAALYYSSTI GGSPLAAPQGGSPTKL PEGATYAAPRGSSPKQ KSYSTSSPINIVSSAG SPHTVQSTISSSPIHQLS ATLSPTKRLVHASEQV LYATATLQRFGSLAK CSQHGHLGPELRALQSP YEDRVYQKPPMSLS LPPAHTGTYRTSSS VPLQRTGSQHGPQNA RASYAAGPASNYADP CPSVESPYSKSGPALP SPSIDSIGKDPSKYPIL CALVYPPSSERASL Q*NRLYPKFRRVLGSG RRFCASKGIKGRFGGS EHGGQHPCYPKLVPTI REGNQKNSERV 4987 35355 A 5028 123 3825 4988 35356 A 5029 I 593 MQVCSSGRILRVSGT EGGRFCLGRGVRNLRE APPTAPSLTALPPDIVD APPTAPSL | KANETI |
| QSALQLNSKPEGSFQY | TVQMS |
| NQTLALGETTPSQLPA | WPSLL: |
| ATGQSFSQGTTSR AGH APPPPPPRPFAPSLG APPPAAAAALYYSST GGSPLAAPQGGSPTKL PGGATYAAPRGSSPKQ KSYSTSSPINIVVSSAG SPPTVQSTISSSPHQLS ATLSPTKRLVHASEQY LYATATLQRFOSLAAQS YEDRVYQKPMSSLS LPPAHTGTYRTSTASS VPLQRTGSQHGPQNA RASYAAGPASNYADP CSVESPYSKSQPALPP SPSIDSIQKDFSKYPILL CALVYPPSSERSASL Q*NRLYPKFRVLGSG RRFCASKGIKGRFCGS: EHGGQHEVPRLVPTI RECONQKNSERV 4987 35355 A 5028 123 3825 4988 35356 A 5029 I 593 MQVCSSGGRILRVSGT EGGRFLCGRGYNLIRE APPTAPSLTALPPDIVD | PASYHS |
| APPPPPPPREPARSLG: APPAAAAAALYYSST GGSPLAAPQGGSPTKL PEGATYAAPGGSPTKL PEGATYAAPGSSPKG KSYSTSSPINIVSSAG SPPTVQSTISSSPIHQLS ATLSPTKRLVHASEQY LYATATLQRPGSLA QHGHLGPELRALQSP YEDRVYQKPPMRSLS LPPAHTGTYRTSTAPS VPLQRTGSQHGPONA- RASYAGPASNYADP CPSVESPYSKSGPALPF SPSIDSIGKDPSKYPILC CALVYPPSSERASSL Q*NRLYPFRRVLGSG RFCASKGIKGRGS EHGGQHPCYPKLVPTL REGNQKNSERV 4988 35355 A 5028 123 3825 4988 35356 A 5029 1 593 MQVCSSGRILRVSGT EGGRFCLGRGVRNLER APPTAPSLTALPPDIVD | RGTQAF |
| APPAAAAALYYSSTI GGSPLAAPQGGSPTKL PEGATYAAPRGSSPKQ KSYSTSSPINIVVSSAG SPPTVOSTISSSPHQLS ATLSPTKRLVHASEQY LYATATLQRPGSLAK CSQHGHLGPELRALQSP YEDRVYQKPPMRSLSE LPPAHGTYRTSSS VPLQRTGSQHGPQNA RASYAAGPASNYADP CPSVESPYSKSGPALPF SPSIDSIQKDPSKYPIL CALVYPPSSERASL Q*NRLYPKFRR VLGSG RFFCASKGIKGRFGGS EHGGQHPCYPKLVPTI REGNQKNSERV 4987 35355 A 5028 123 3825 4988 35356 A 5029 I 593 MQVCSSGRILRVSGT EGGRPCLGRGVRNLRR APPTAPSLTALPPDIVD | LAGPER |
| GGSPLAAPQGGSPTKL | SAFHLPI |
| PEGATYA-APROSSPRQ KSYSTSSPINIVSSAG SPPTVQSTISSSPINIVSSAG SPPTVQSTISSSPINIVSSAG SPPTVQSTISSSPINIVSSAG ATLSPTKRLVHASEQY LYATATLORPOSLA SQHGHLGPELRALQSP YEDRVYQKPPMSLS,SE LPPAHTGTYRTSTAPS VPLQRTGSQHGPQNA RASYAGPASNYSO PSYSTOSHOPONA RASYAGPASNYSO PSYSTOSHOPONA RASYAGPASNYSO CCLVVYPPSSERASLI Q*NRLYPEFRRVLGSG RRFCASKGIKGRFGOS CRONGNISERV 4987 35355 A 5028 123 3825 4988 35356 A 5029 I 593 MQVCSSGRILRVSGT EGGRPCLGRGVRNLRE APPTAPSLTALPPDIVD | LPAPPR |
| KSYSTSSPINIVVSSAG SPPTVQSTISSSPIHQLS ATLSPTKRLVHASEQY LYATATLQRPGSLAAC SQHGHLGPELRALQP YEDRVYQKPMRSLSC LPPAHTGTYRTSTAPS: VPPLQRTGSQHHOPQNA. RASYAAGPASNYADP CPSVESPYSKSGPALPP SPSIDSIQKDPSKYPILC CALVYPPSSERSASL Q*NRLYPKFRRVLGSG RRFCASKGIKGRFCGS: EHGGQHPCYPKLVPTI RECNQKNSERV 4987 35355 A 5028 123 3825 4988 35356 A 5029 I 593 MQVCSSGGRILRVSGT EGGRPLCAGROYNRLIRE APPTAPSLTALPPDIVD | QRGGS/ |
| SPPTVQSTISSSPIHQLS | SPSRLA |
| ATI.SPTRELVHASEQY LYATATLQRPGSLAX SQHGHLGPELRALQSP YEDRVYQKPPMESLS LPPAHIGTYRTSSS VPLQRTGSQHGPQNAX RASYAAGPASNYADP CPSVESPYSKSGPALPF SPSIDSIQKDPSKYPILC CALVYRPSSERRASL Q*NRLYPKFRRVLGSG RRFCASKGIKGRFGGS EHGGQHPCYPKLVPTI REGNQKNSERV 4987 35355 A 5028 123 3825 4988 35356 A 5029 I 593 MQVCSSGRILRVSGT EGGRPCLGRGVRNLRR APPTAPSLTALPPDIVD | LSPIRVT |
| LYATATLQROSLAAC SQHGHLGPELRALQSP YEDRVYQKPPMRSLSC LPPAHTGTYRTSTAPS: VPLQRTGSQHGPQNA. RASYAAGPASNYADP CPSVESPYSKSQPALPP SPSIDISIQKDPSKYPILC CALVYRPSRERASSL Q*NRLYPKFRR VLGSG RFCASKGIKGRGSG EHGGQHPCYPKLVPTL REGNQKNSERV 4987 35355 A 5028 123 3825 4988 35356 A 5029 1 593 MQVCSSGGRLRVSGT EGGRPCLGRGVRNLRI APPTAPSLTALPPDIVD | STIGTY |
| SQHCHLGPELRALQSP YEDRVYQKPPMRSLSC LPPAHTGTYRTSTAPS: VPLQRTGSQHGPQNAP VPLQRTGSQHGPQNAP VPLQRTGSQHGPQNAP CPSVESPYSKSGPALPF SPSIDSIQKDPSKYPILC CALVYPPSSERAFSLU Q*NRLYPFERRVLGSG RRFCASKGIKGRFGS CHGQQHPCYPKLVPTL REGNQKNSERV VPLQRTGSG VPL | SKHSQE |
| VEDRVYQKPPMRSLS(| SRASYS |
| LPPAHTGTYRTSTAPS: | EHHIDP |
| VPLQRTGSQHGPQNA. RASYAAGPASNYADP' CPSVESPYSKSGPALPF SPSIDSIQKDPSKYPILC CALVYRPSSERAS, VALSCOPEN, VALSC | SQGDP |
| RASYAAGPASNYADP CPSVESPYSKGPALPF | SPGVDS |
| CP\$VESPY\$KSGPALPE SP\$IDSIQKDP\$KYPILC CALVYRP\$SRERASSL Q*NRL/PPKFRVLIGS RFPCASKGILGRFGCS EHGQHPCYPKLVPTL REGNQKNSERV 4987 35355 A 5028 123 3825 4988 35356 A 5029 I 593 MQVCSGGRILRVSGT EGGRPCLGRGVRNLRE APPTAPSLTALPPDIVD | AATFQ |
| SPSIDSIQKDPSKYPILC CALVYRPSSRERASSIG Q^NRLYPKFREV CALVYRPSSRERASSIG Q^NRLYPKFREV CALVYRPSSRERASSIG RRFCASKGIKGRFCGS: EHGGQHPCYPKLVPTI REGNQKNSERV W | /RQLQY |
| CALVYRPSSRERASSL Q*NRLYPKERVLGSG RRFCASKGIKGRECOS EHGGQHPCYPKLVPTL REONQKNSERV 4987 35355 A 5028 123 3825 | EGTLAF |
| O+NRLYPKFRRVLGSC RRFCASKGIKGRFCGS: EHGGQHPCYPKLVPTI REGNQKNSERV 123 3825 123 3825 124 124 125 12 | DGGNPI |
| RRFCASKGIKGRFCGS: EHGGQHFCYPKLVPTL | LKSMC |
| ### BHGQHPCYPKLVPTL ### REGNQKNSERV ### 153555 A 5028 123 3825 #### 15029 1 593 MQVCSSGGRILRVSGT ### EGGRPCLGRGVRNLRI #### APPTAPSLTALPPDIVD ### APPTAPSLTALPPDIVD | FEGMQ |
| REGNOKNSERV | SLEQDC |
| 4987 35355 A 5028 123 3825 4988 35356 A 5029 1 593 MQVCSSGGRILRVSGT EGGRFCLGRGVRNLRI APPTAPSLTALPPDIVD APPTAPSLTALPPDIVD | .WNPHQ |
| 4988 35356 A 5029 I 593 MQVCSSGRILRVSGT EGGRFCLGRGVRLNE APPTAPSLTALPPDIVD | |
| EGGRFCLGRGVRNLRE APFTAPSLTALPPDIVD | |
| APFTAPSLTALPPDIVD | |
| | |
| | |
| MEDLTEVTTASESHPH | |
| YSSSKGFLRLCDMRAA | |
| HSKHPCDDIGPIQIIQGI | |
| GWMIILPALQSTFRCRI | |
| RAFLAPRLCDFSTSQPC | |
| PVMSGLISPWTKPSRSS | VFSM |
| 4989 35357 A 5030 I 894 | |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | _ | | | | |
| 4990 | 35358 | Α | 5031 | 1 | 3115 | RQICSMASELGARDDGGCTELA |
| | | | | | | KPLYLQYLERALRLDHFLRQTS |
| | | 1 | | l | İ | AIFNRNISSDDSEDGLDDSNPLL |
| | | 1 | | 1 | | PQSGDPLIQVKEEPPNSLLGETS |
| | | 1 | | İ | | GAGSSGMLNTYSLNGVLQSES |
| | | 1 | | i | 1 | KCDKGNLYNFSKLKKSRKWLK |
| | | | | | | SILLSDESSEADSQSEDDDEEEL |
| | Ì | 1 | | | | NLSREELHNMLRLHKYKKLIIQ |
| İ | | l | | | | NKYSKDKELQQYQYYSAGLLS |
| | | 1 | | | | TYDPFYEQQRHLLGPKKKKFK |
| | | l | | | | EEKKLKAKLKKVKKKRRRDEE |
| | | _ | | | | LSSEESPRRHHHQTKV |
| 4991 | 35359 | Α | 5032 | l l | 1522 | MVAQASGQTIREAEVGGSLTA |
| | | l | | | 1 | QEVEATSILLSDESSEADSQSED |
| | | 1 | | | | DDEEELNLSREELHNMLRLHK |
| | | ı | | | | YKKLHQNKYSKDKEWMSQLA |
| | | l | | | | ALNYYLAGGDEQKLLDLSYSPF |
| | | 1 | | | | QNRQPAMAKAHNNNNNNNN |
| | | l | | | | NNNNHNKNPKRLLDERELLTY |
| i | | 1 | | | | STATQSFDTRNTRSFDEDAKES |
| | | 1 | | | | RAAALRAANKSGTGFGESYSL |
| | | 1 | | | | ANPSIRAGEDIPQPTIFNGKLKG |
| | 1 | 1 | | 1 | | YQLKGMNWLANLYEQRLERL |
| | 1 | 1 | | | | RFLQLEQEHTCPQEGRAERLRG |
| | | 1 | | | | QPLKLWALLHFIMPTLFDSHEE FNEWFSKDIESHAENKSAIDET |
| | | | | | ŀ | |
| | | | | | | KLKKVKKKRRRDEELSSEESPR |
| | | | | | | RHHHQTKVFAKFSHDAPPPGT KKKHLSIEQLNARRKVWLSIV |
| | | | | | ł | KKELPKKTLYTODAPFHVVITS |
| | | | | | | NQLVVQDVKYFQRVKWQYMV |
| | | 1 | | | | LDEAQALKSSSSLTRSNARYPL |
| | | | | | | VSSQRKIHDQQVTTDKSSKMDF |
| | | | | 1 | | KEEEYIPAKHEMENTKLQFYLS |
| | 1 | | | | | AIGEKQ\VRWKILLQFQCRNRL |
| 1,00 | | | | | | LLTGTPIQNTMAE |
| 4992 | 35360 | A | 5033 | 1 | 974 | MGFHHVARAGLELLTSGMCCY |
| 4992 | 33300 | ^ | 3033 | 1' | 274 | FAQDLRPEQSIKASLQRIILRKY |
| | 1 | | | | | EKCGHHNLOLKKGYKSVDEYK |
| | | 1 | | | | VHKGSYNGFNQCLTTTQSKIFQ |
| 1 | 1 | | | | 1 | CDKYVKDFHKFSNSNRHMTEK |
| | 1 | 1 | | | | NPFKCKECGKSFCVLSHLTQHK |
| | | | | | | RIHTTVNSYKLEECGKAFNVSS |
| | 1 | 1 | | | | TLSQHMRIHTGQKHYQCGEM\ |
| | | 1 | | | | GIAFNKSSHLNTHKIIHTGEKSY |
| | 1 | 1 | | | 1 | KREECGKAFNISSHLTTHKIIHT |
| | 1 | 1 | | | 1 | GENAYKCKECGKAFNQSSTLT |
| | | 1 | | l . | | RHKIIHAGEKPYICEHCGRAFN |
| | | 1 | | | | OSSNLTKHKRIHTGDKPYKCEE |
| | 1 | | 1 | Į. | | CGKAFNVSSTLTQHKRIQQQQQ |
| | 1 | 1 | | | l | QTIKQTKNLLNNNNKKLWV |
| | | L | l | | l | QTIKQTKIALLIAINIAKKLW V |

| SEQ ID | | | SEQ ID NO: | | | Amino acid sequence (X=Unknown, |
|--------|----------------|-----|------------|-------------------------------|---------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 4993 | 35361 | В | 5034 | 22 | 684 | |
| 4994 | 35362 | Α | 5035 | 1 | 1338 | |
| 4995 | 35363 | A | 5036 | 1 | 596 | MGMTDMGKSKKKSQGPPSFPP |
| | | | | | | GGAPPPAIGAPAGRERPPGTGD |
| | 1 | Į | | | | PFNQRPCDNLKTCHTSHGSVM |
| | | 1 | | | 1 | AETAVINHKKRKNSPRIVQSND |
| | 1 | | | | | LTEAAYSLSRDQKRMLYLFVD |
| | i | | i | | | QIRKSDGTLQEHDGICEIHVAK |
| | | 1 | | | | YAEIFGLTSAEASKDIRQALKSF |
| | | ł | | | | AGKEVVFYRPGEDAGHEKGYE |
| | 1 | | | | | SFPW/FIKRSPE*RRGKFPFTQM |
| | | 1 | | | | GQD |
| 4996 | 35364 | Α | 5037 | 787 | 1692 | |
| 4997 | 35365 | Α | 5038 | 289 | 1338 | |
| 4998 | 35366 | Α | 5039 | 982 | 1347 | |
| 4999 | 35367 | Α | 5040 | 1 | 780 | |
| 5000 | 35368 | В | 5041 | 148 | 334 | |
| 5001 | 35369 | Α | 5042 | 2 | 545 | |
| 5002 | 35370 | Α | 5043 | 1 | 732 | |
| 5003 | 35371 | Α | 5044 | 1 | 1110 | |
| 5004 | 35372 | A | 5045 | 1 | 1170 | |
| 5005 | 35373 | Α | 5046 | 1 | 870 | |
| 5006 | 35374 | Α | 5047 | 1 | 1254 | |
| 5007 | 35375 | A | 5048 | 614 | 1236 | TARVAAARRRCQCWGSGACGS |
| | | | ļ | | | ALTLPRTSSLTLTETPIVQQTRM |
| | | | 1 | | | VVRCPTASLPSQWRSCPSSTWA |
| | | | | | | VPKTPPTWTCWRNSAILSL/VVF |
| | | | | | | IRDKLMERRNRRTGRTEKARIW |
| | | | | | | EVTDRTVRTWIGEAVAAAAAD |
| | | ł | | | | GVTFSVPVTPHTFRHSYAMHM |
| | | l | | | | LYAGIPLKVLQSLMGHKSISSTE |
| | | 1 | | | | VYTKVFALDVAARHRVQFAMP |
| **** | 2.52.7.6 | _ | 50.10 | | 1201 | ESDAVAMLKQLS |
| 5008 | 35376 35377 | B | 5049 | 2 | 1281 893 | |
| 5010 | 35377 | A | 5051 | 1 | 1416 | |
| 5011 | 35378 | B | 5052 | 49 | 768 | |
| 5012 | 35380 | A | 5052 | 1 | 792 | |
| 5012 | 35381 | C | 5054 | 1 | 1461 | |
| 5014 | 35382 | Ā | 5055 | 887 | 1203 | RPEKAR/IWGVTDRTVRTWIGR |
| 3014 | 33302 | l^ | 3033 | 1007 | 1203 | AVAAAAADGVTFSVPVPPHTF |
| 1 | 1 | | | l | | RHSYAMHMLYAGIPLKVLOSL |
| | 1 | 1 | İ | l | | MGHKSISSTEVYTKVFALDVAA |
| | | l | | 1 | | RHRVOFAMPESDAVAMLKOLS |
| | L | | L | l | L | KTIKT GEMINESDA VANILKULS |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| |] | | | sequence | l | |
| 5015 | 35383 | IA | 5056 | 740 | 11431 | CCQTLPVFHPPHPSHLGPRPCPP |
| | | l' | | | | TH/HLPSEHRSLFLEAACHDSDS |
| | 1 | 1 | | | | LEPLNLSSGSKTKSPSLPPKAKK |
| | 1 | 1 | | | | PKGLEISA/RPAGALRHRHRLHR |
| 1 | | 1 | | | | POOPSPPLGIPHPSLL\TAQVFIR |
| | | 1 | | | | DKLMERRNRRTGRTEKARIWE |
| | | ı | | | | VTDRTVRTWIGEAVAAAAADG |
| | | 1 | | | | VTFSVPVTPHTFRHSYAMHMI. |
| | | ł | | | | YAGIPLKVLOSLMGHKSISSTE |
| | | 1 | | | | VYTKVFALDVAARHRVOFAMP |
| | | | | | | ESDAVAMLKOLS |
| 5016 | 35384 | A | 5057 | 1040 | 1477 | EDDATAMERQES |
| 5017 | 35385 | A | 5058 | 1 | 1422 | |
| 5018 | 35386 | В | 5059 | 1 | 1404 | |
| 5019 | 35387 | Ā | 5060 | 353 | 870 | AWSSPRSRCPLHSRTPSLPRVEG |
| 3017 | 33367 | ^ | 3000 | 333 | 0,0 | QAHIGPGL/HRYQQGHQDLFIL |
| | | | | | | RSDLPSQVFIRDKLMERRNRRT |
| | | | | | 1 | GRTEKARIWEVTDRTVRTWIGE |
| | | l | | | 1 | AVAAAAADGVTFSVPVTPHTF |
| | | l | | | | RHSYAMHMLYAGIPLKVLOSL |
| | | | | | | MGHKSISSTEVYTKVFALDVAA |
| | | l | | | | RHRVOFAMPESDAVAMLKOLS |
| 5020 | 35388 | В | 5061 | 1 | 1612 | KIIK V QI AMI ESDA V AMERQES |
| 5020 | 35389 | A | 5062 | 2 | 429 | WGHWASPRLWWAWGSPGPAG |
| 3021 | 33309 | l^ | 3002 | _ | 727 | LKPPGTVAASTGFSOWLLYIETI |
| | | | | | | SRTPVELELKNSKVRKDVLS/R |
| | | l | | | | GPHSLYLVQDAQLEHAMEIAK |
| | | l | | | | VSVOALOAYRAPPPRMEOANP |
| | | | | | | KTPPDANLYKKGPSPSPRRANT |
| | | | | | | |
| 5022 | 25200 | ١. | 5062 | 500 | 1003 | TRLGSRATKTIHPDS |
| 3022 | 35390 | A | 5063 | 508 | 1007 | PPLAQKQAVASQSHSPCGGFHR |
| | | 1 | | ì | | RWFRMRLTGEIMKIITCFKLVP |
| | | | | | | EEQDIVVTPEYTLNFDNADAKI |
| | | 1 | 1 | | 1 | SQFDLNAIEA\ASQLATDDDEIA |
| | | 1 | ł | | 1 | ALTVGG\SLLQNSKVRKDVLSR |
| | | ı | i | | 1 | GPHSLYLVQDAQLEHALPLDT |
| l | | 1 | | | 1 | AKALAAAIEKIGFDLLIWTSSRI |
| 1 | 1 | 1 | ı | ŀ | 1 | QAVALASPLSNT |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| l | | | | sequence | | |
| 5023 | 35391 | A | 5064 | 1 | 1670 | MNIEFFDPPRIVSGLTLNRINIQE |
| | | | | | | PFHLTGIRYCIDERQRTVNDVL |
| 1 | 1 | | | | 1 | QAHAGRVLQQYLPAPATATFR |
| | | | | | ŀ | CQSRNRTENPQFLVCQWAGED |
| | 1 | | | | | OITOLLOEOWRVLIVMIFRTHN |
| | 1 | | | | | HMAGPRRWFRMRLTGEIMKIIT |
| 1 | | 1 | | | | CFKLVPEEQDIVVTPEYTLNFD |
| | | 1 | | | | NADAKISOFDLNAIEAASOLAT |
| | | | | | | DDDEIAA\LTVGGSLLQNSKVR |
| | i | | | | | |
| | | 1 | | | i | KDVLSRGPHSLYLVQDAQLEH |
| | | 1 | | | | ALPLDTAKALAAALEKIGFDLL |
| 1 | 1 | | ļ | | 1 | IFVKGTCLVLLVAFGLVTTHFQ |
| 1 | | ١. | | | | PCLFGVQNGEQETVQILLVGVV |
| 1 | | | | | | GGMERAERIIIPFTLAINNQPTT |
| | i | | | | | RLTKTIAQGMPAIIQRNIPNPRIS |
| | l. | | | | | LQPAPTPRHSANPATMQPHAQ |
| | ŀ | | | ı | | ATPTPKPHTRTYPTRPPHPQRSA |
| 1 | | | | | | TPGTQRTPTPGPQTARDRAPKP |
| | 1 | | | | | DHTRPQTAHTAHHTSNDPQQR |
| | | | | | | HRTRQRHTNKQHPHPAPPRLPT |
| 1 | | | | l | | LPQNNKRQKPAESDTRKHHTP |
| | | | | | | HMRQPTAHAETTARNTQAAQH |
| | | | | | 1 | CHTQNTPQANRHATGDRPEHH |
| | l | 1 | | | | QARDRTRIDPKPNPDPRTITGHT |
| | | | | | | KGTTYAHKHTPLATHHMTRPT |
| | | | | | | TGHRHGTHH |
| 5024 | 35392 | Α | 5065 | 548 | 924 | GLLRPRFSVNSPHFNTWLLSAN |
| | | 1 | | | | SINWR*YGFMPSLLILLL*LNPM |
| | 1 | | | | | GRYSGASLVSRRMASTTLPGHS |
| | | 1 | | | | IAMRQPVCGIFALTRAIISI/AM |
| | I | | | | | WDFHVEDFMPERMALNLVLNS |
| | | | | | | AI*LPKIFPARWMKFS |
| 5025 | 35393 | Λ | 5066 | 33 | 424 | CRFDESFWCDA\HAIFVAPTLY |
| | | | | | | AYDFYADKTLVPLTDALANTW |
| | | | | | | OKOFPLDYGKGRLWGSVAFVI |
| | 1 | 1 | | | | GSALTGKLVTMFDYRVILALLT |
| | į. | 1 | | l | | LGVASMLLGFLIRPTIQPQGASL |
| | l l | 1 | | | | QQESTGWSAWLALVRQNWRF |
| | | | | | | LA |
| 5026 | 35394 | В | 5067 | I | 265 | |
| 5027 | 35395 | Α | 5068 | 142 | 609 | CLFRQVSAPHITRVCITRSAATI |
| | | 1 | | | I | QTIDLNNLDTGD*LQPAFPPVW |
| l | | 1 | | l | | LISPGPFHPTPSVTRVPLEKEIRT |
| 1 | | 1 | | I | | FAORLSVLHGINAPEFFDKPLFS |
| 1 | | ı | | I | | SLVLTLRDEGYISDSGDAEPAE |
| | | 1 | | | | TMKVYQLQTNIVIIHKCFKAGF |
| | | | | | | TLAVGNOFLLINKORASHON |
| | | 1 | | | L | TELL GITGI EELINGICASIIQI |

| SEO ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------------------|-----------------------------|--|
| NO: | of peptide | | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 5028 | 35396 | A | 5069 | 983 | 1387 | LVWKVIPWRPAWKITLCVLNS |
| | | | | | | CRRACLFAPAT*TANRLQAVC/ |
| | | | | | | WLOSANPSINRGTLEKESRTVA |
| | | | | | | QRLSVLHGINAPEFFDKAVFSSL |
| | | | | | | VLTLRDEGYISDSGDAEPAETM |
| | | | | 1 | | KVYQLLAELITSDVRLTIESATQ |
| | | | | | | GEG |
| 5029 | 35397 | Α | 5070 | 1 | 1815 | |
| 5030 | 35398 | С | 5071 | 1 | 354 | |
| 5031 | 35399 | Α | 5072 | 1 | 678 | MTDKQQGEKQKQKTEDKTKT |
| ŀ | | | | | | KQKQRKNKTDKRRKTKTERNT |
| | | | l | | | QRTPERQTNTNQTRTKQ/RRPD |
| | 1 | | | | | TGVTQADTRQDTSARR\LMRQP |
| l | | 1 | | | | RSAAAWMAALRGARDPKLITM |
| | | 1 | | | | VPHSKISRSIVRKGLPMTETQRR |
| | | | | | | TETSKNYRPREQQTRNRQQQD |
| | | | | | | PROQRTVQTHQQEERRETKDN |
| | | į. | | | | NTHTKPHETLARRHRRHNIHAL |
| | 1 | | | | | AAADLVIEAASEVWKSKKRSL |
| | | | | | | HSWRKFAPTNAIDH |
| 5032 | 35400 | Α | 5073 | 93 | 729 | SADPRNRRDTRAAKFTRDAGK |
| | | İ | | | | TDC*NL*THIETPDPGDRYSRAG |
| [| | | | | | SCGPG/PLKRRLNVWKSKKRSL |
| | | l | | | | HSWRKFARHKRY*PLTLRQSLY |
| | l | | | | | TAIAAEIKNPERVAGLHFFNPAP |
| l | | l | Ì | | | VMKLVEVVSGLATAAEVVEQL |
| | | 1 | | | | CELTLSWGKQPVRCHSTPGFIV |
| | İ | i | | | | NRVARPYYSEAWRALEEQVAA |
| | | 1 | | | | PEVIDAALRDGAGFPMGPLELT |
| Į. | l | 1 | | | | GPDWAGPPFCCHLFGV |
| 5033 | 35401 | Α | 5074 | 145 | 1038 | SILRLROKRKOLTAYDFADNCD |
| 1 | 1 | i i | | | | KALY*RNHRLIREILALVCAHD |
| 1 | | | | | | ROKK/YLPSLAGFL*LKNEINRL |
| | | ļ. | | | | SVRGW/SRRRSFSVR*/PFTNTD |
| | | 1 | | | | RARSHFYOFVIIDELOSLFOSHA |
| | | l | | | | DRRNONNGFVSTGSTHVGOFL |
| | | 1 | | | | TGQAVYSQVVRAAMNTDNLTF |
| | | ĺ | | l | | VNFCTVTEEQLTAILQTEQRER |
| | 1 | | | l | | DRFTLTVRDQYAVLTLTHFTRT |
| | l | | 1 | | 1 | YVVVAEGGVQQTSTGSHGHE |
| | 1 | | | | I | LRTEANQTTAWDHVVETYAAF |
| 1 | | | 1 | l | 1 | TVWIHVFQVALTFAQRLHYRT |
| | 1 | | 1 | l | | LMLFFNVQSHVFIRLLFTTVDFT |
| 1 | 1 | | l | l | | EDNFRTGYROFETFTTH |
| L | 1 | 1 | l | l | | EDMEKTOTKOLETETTU |

| sequence 09:540,217 codon for peptide of peptide sequence deletion, \possible sequence sequence sequence sequence sequence deletion, \possible sequence sequ | ossible nucleotide e nucleotide insertion) |
|--|---|
| 5034 35402 A 5075 39 4329 YAPATFSAA' RNSAMHWO EREQWLAVC PHRAAAGRL RG*PHLCFRP AIMMETTPPG DKGYAPDFF HRPEGGDLA LRVPVANCA LRVPVANCA | |
| 5034 35402 A 5075 39 4329 YAPATFSAA' RNSAMHWQ' EREQWLAVC PHRAAGRL RG*FHLGFR AIIMETTPGC DKGYAFDFH HRPEGDLIA LEVPVANCA | QPTPKKINNPVP |
| RNSAMHWO EREQWLAVC PPIRAAAGRL RG*PHLCFRP AIIMETTPPG DKGYAFDFFI HRPEGGDLA LRVPVANCA | QPTPKKINNPVP |
| RNSAMHWO' EREQWLAVC PHRAAAGRL RG*PHLCFRP AIIMETTPPG DKGYAFDFFI HRPEGGDLA (LRVPVANCA | |
| EREQWLAVG PHRAAAGRL RG*PHLCFRP AIIMETTPPG DKGYAFDFF HRPEGGDLIA LKVPVANCA | TRIQAQANGYWL |
| PHRAAAGEL RG*FHLCFRP AIIMETTPPG DKGYAFDFF HRPEGGDLIA LRVPVANCA | EQWFWRMEWSO |
| RG*FHLCFRP AIIMETTPPG DKGYAFDFF HRPEGGDLID LRVPVANCA | CHHHGNDATWH |
| AIIMETTPPG DKGYAFDFF HRPEGGDLIA LKVPVANCA | CV**RIEQPQEGY |
| HRPEGGDLIA LRVPVANCA | TGVNFIFVSDPAF |
| LRVPVANCA | CLEPMSHAPDDH |
| | LAPGESTTSEMS |
| AMAIGERAP | VTTASLDSYYGE |
| | VALLDFAASARL |
| | ATOIGDIKRIKLS |
| | HPGEDAGLYEA |
| 5035 35403 A 5076 1 625 MRASGTDEA | VVLVPPIRMTLEC |
| | VEGAAAAFEALE |
| | I\RYGEGSP\WFDI |
| VLPCGGGITI | TLHKLR\SAQPLL |
| | KPVGLRYDPQAC |
| | TGWNLNGFEASI |
| | DGQYYCQGPRT |
| | GSSDPHDTTDSNN |
| DRVLGPSRYI | OGQYYCQGPRTL |
| TIRRTVIMTG | |
| 5036 35404 A 5077 3 516 ATLSCEVVLE | NLAASPVVTTLE |
| YTLFDGER\V | VHSSAIDHLAIEK |
| LTSASLAFTV | EQPQQWSAESPY |
| LYHLVMTLK | DANGNVLEVVPQ |
| RVGFRDIKVF | RDGLFWINNRYV |
| MLHGVNRHE | NDHRKRRGVGM |
| DRVEKDLQL | MKQHNINSVRNA |
| HYRKRRNKE | VRTKKKIESIEEK |
| 5037 35405 A 5078 3 678 ASYYCTRN/D | LELVAVCDSRLS |
| QRQALAEKY | GNASVWDDPQA |
| MLLAVKPDV | VSVCSPNRFHYE |
| HTLMALEAG | CHVI\QAREM/CD |
| TARKLGKVL. | AYDFHHRFALDT |
| QQLREQVTN | GVLGEIYVTTAR |
| ALRRCGVPG' | WGVFTNKELQGG |
| GPLIDIGIHMI | .DAA\MYVLGFPR |
| /SVEDSLCGTI | ELHSGCILWLETS |
| FALNIREHAI | MNIRFCGDKAGA |
| SVFPAHIYTA | TQR |
| 5038 35406 A 5079 2 294 YSFMV/PIFGC | GRRWTVFSTAILI/I |
| PCVWLGIAVO | ONPNT/PFGIFIVIA |
| LLCGFAGAN | FASSMGNISFFFP |
| KAKQGA\PVF | AF/LGVNGVPQA |
| DGSVMSLAM | PH |
| 5039 35407 A 5080 I 834 | |
| | VIALLLV\CLAFLY |
| PAAN\SEIHL\ | GVLSIFWGDPDG |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 5041 | 35409 | ĪA | 5082 | 11 | 324 | MQGGYNIHPLIDALDDAKLAPI |
| | ł | | 1 | | | AAKALSHTLLMFDNFYDVEEK |
| i | | | 1 | 1 | | AKRGNEYA\QVMQSWAD/AEW |
| | | | l | | | FLNRPALAEKLTVTVFKVTGET |
| | | | | | i | NTDDLSPAPDAWSRPDIPLHAL |
| | | | | | | GC |
| 5042 | 35410 | A | 5083 | 1 | 866 | MGLAQAKLLIEAPVNGGRNYN |
| | | 1 | | | | GPKVAKFLVGGASLNDVYLHQ |
| | | | 1 | | | HDKYRYDRYHLIRNREKTH\IM |
| | | 1 | | | | PEWVTQNIMNGRGVNRLDDVN |
| | | | | | | RPKSPEIKNDIRLFRQELRDAAY |
| | | 1 | | | | HFQGDADNDQLSVTPLVGLGK |
| | | | 1 | | | SSLLIK\TIFHRMRWAEQNLSICS |
| | | | | i | | SSFNRPAIFVRNIIQLLREGKKV |
| | | | | | | EITVGDKHENDFYIPEDEPFKIIC |
| | | 1 | | | | ALPYLYEINLRRFLSRLQYYVN |
| | | 1 | | | 1 | TDQLVVRVW\KEDDN\TYHL\K |
| | | | | | | GWWGDDKWMVITG\NKLDPR |
| | | | | | | AWRLDLENAILIHDPOLELAPO |
| ř | | | 1 | | | REKELE |
| 5043 | 35411 | Α | 5084 | 1 | 3483 | VMFFFLPGLLMASWATRTPAIR |
| | | 1 | | | | DILSVSIAEMGGVLFGLSIGSMS |
| | 1 | | | | | GIL/SLGVVSETLWDT*C/HSWS |
| | | | | | | RCPAH*SG**Y*/VLALWLTSPL |
| | 1 | | | | l | LFAVGLGVFGASFGSAEVAINV |
| | | | 1 | | | EGAAGEREMNKTGLPMMHGF |
| l | | 1 | 1 | | | YSLGTLAGAGVGMALTAFGVP |
| l | | | | | | ATVHILLAALVAQIAAWYKAL |
| | | | | | | QEQIPDFIPRAPQRQMIADVAK |
| l | | 1 | | | | TLAGEEGRHLAIEAPTGVGKTL |
| | | 1 | l | | | SYLIPGIAIAREEQKTLVVSTAN |
| | | | | | | VALQDQIYSKDLP |
| 5044 | 35412 | Λ | 5085 | I | 848 | MLVGKVVVSEGASFRTHGAVD |
| | | 1 | | | | TSKAYVSLENSGWTIIADITTTN |
| | | | | | | QNTLLNLANLAMSDANVIMME |
| | | 1 | | | l | EPVTRSSVTASAENFITLTTNTL |
| l | | | | | | SGNGNFYMRTDMANHQSDQL |
| | | | | | | NVTGQATAGDSLTLVTTGGGD |
| | | 1 | | | | AAFTLGNAGRVFDIGTYEYTLL |
| | | 1 | İ | | | DNGNHSWSLAENRAQITPSTTD |
| | | | | 1 | | VLNMAAAQPLVFDAELDTVRE |
| | 1 | 1 | l | | | RL\GSVKGVSYDTAMWSSAINT |
| | 1 | 1 | 1 | | 1 | RNNVTTDAGLRAQAIKTVHHR |
| | | 1 | | | | QNRLIHFSLNGSTFNVYRHFRR |
| | | | | | | TKTCPKDAETNGKEQGRCQPE |
| 1 | | | | | | CQT |
| 5045 | 35413 | В | 5086 | 75 | 1777 | |

| SEQ ID NO: | SEQ ID NO: of peptide sequence | | SEQ ID NO: in USSN 09/540,217 | Nucleotide location of first codon for peptide sequence | Nucleotide location of last codon for last amino acid of peptide sequence | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
|---------------|--------------------------------------|---|-------------------------------------|--|---|---|
| 5046 | 35414 | A | 5087 | 1 | 860 | IMKAPGLPADOOFFADLFSCLV LNPQLLGRVWFASQPASLPVGS LCIDFPRLDIVLRGEYGNILEAK QQRLVEGEMLFIPARAANLPVN NRPVMLLSI VPAFTWIGLSFY DSRTTSLLHPARQIOLPSLQRG EGEAMLSALTLFSRSPLEQNIIQ PLVLSLLHLCGSVVNMPPGNSQ PRGDELYHSICTWVQDNYAQP LTRESYAQFFDITPNHLSKLFAQ HGTMRFIEYVRWRMAKARMI LQKYHLSIHEVAQRCGFPDSDY |
| 5047 | 35415 | С | 5088 | 86 | 601 | |
| 5048 | 35416 | Α | 5089 | 1 | 870 | |
| 5049 | 35417 | A | 5090 | 305 | 625 | VAPGDRHAFPLAPSGLSPELTLY QTQCCAQATVQGLEGTRSWSQ SGTSSLSPWSHTSLRRRRKEEG EEEEEEEEEEEEEEEEEEEEEEEEEEEEEEE |
| 5050 | 35418 | В | 5091 | 1 | 552 | |
| 5051 | 35419 | А | 5092 | 2810 | 3117 | LTLNSHMAPALIPILAMSAPMT PMKN/LSQVHAQGLVIRDLPLIA SNFRNTEDLSSYLKRHNIVAIA DIDTRKHAACAVPNTLVARGL RKHLKRVAAPQHWIAG |

| SEO ID | SEO ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | | in USSN | location of first | codon for last amino acid | *-Stop codon, /=possible nucleotide |
| | sequence | 1 | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 5052 | 35420 | A | 5093 | 2 | 1902 | LKYPMKRVGKRGEGKFERISW |
| | | | l | | | DEALDTISDNLRRILKDYGNEA |
| | | ı | | | | VHVLYGTGVDGGNITNSNVPY |
| | | 1 | | l | | RLMNSCGGFLSRYGSYSTAQIS |
| | | 1 | | ŀ | | AAMSYMFGANDGNSPDDIANT |
| | | | | | | KLVVMFGNNPAETRMSGGGVT |
| | | 1 | | | | YYVEQARERSNARMIVIDPRYN |
| | | | | | | DTAAGREDEWLPIRPGTDGAL |
| | | | | | | ACAIAWVLITENMVDQPFLDK |
| | | 1 | | l | | YCVGYDEKTLPANAPRNAHYK |
| | | | | | | AYILGEGPDGIAKTPEWAAKIT |
| | | | | | | SIPAEKIIOLAREIGSAKPAYICO |
| | | | | 1 | | GWGPORHSNGEOTSRAIAMLS |
| l | | | | | | VLTGNVGINGGNSGVREGATG |
| | | | | 1 | | SAVGEVVFNTSMTGYOEILTD\ |
| | | | | | | LPI\PSNRYS\SYP\ILAMSAPMTP |
| | | 1 | | l | | MKN/LSOVHAOGLVIRDLPLIAS |
| | | l | | i | | \NFRNTEDLSSYLKRHNIVAIA\ |
| | | 1 | | l | | DIDTRKLTRLLREKGAQNGCIIA |
| | | 1 | | l | | GDNPDAALALEKARAFPGLNG |
| | | | | | | MDLAKEVTTAEAYSWTQGSW |
| | | | | ŀ | | TLTGGLPEAKKEDELPFHVVAY |
| | | | | | | DFGAKRNILRMLVDRGCRLTIV |
| | | | | | | PAQTSAEDVLKMNPDGIFLSNG |
| | | 1 | | l | | PGDPAPCDYAITAIQKFLETDVF |
| | | 1 | | l | | VFGICLGHQLLALASDVEKNVV |
| | | l | | | | MITAONHGFAVDEATLPANLR |
| | 1 | l | | l | | VTHKS\LFDRYVTGHSSHR*TG\ |
| | | l | | l | | FSFORHPEASPGPHDA\AP\LFD |
| 5053 | 35421 | A | 5094 | 8 | 456 | TST QIGHTENST GITTEN WIT BEE |
| 5054 | 35422 | Ā | 5095 | 377 | 1228 | KQARGRLCPAKPQGWSCPRPW |
| 3034 | 33422 | ^ | 30,5 | l''' | 1220 | OPTFC/GQCDLKVRPGVIGDHF |
| | | l | | l | | GALKFDCPTGFRTCLGRITPLFL |
| | | l | | İ | | PSSPIWNGCIFPIPVPGGDCGEG |
| | | 1 | | | | VOIRSLSCMVHSGSISHAAGRV |
| | 1 | l | | | | EDALCGEMPFQDSILKQLCSVP |
| | | l | | | | CPGDCHLTEWSEWSTCELTCID |
| | | 1 | | | | GRSFETVGROSRSRTFIIOSFEN |
| | | ı | | | | ODSCPOOVLETRPCTGGCSPOA |
| | | I | | l | | |
| 1 | | 1 | | l | | RPAAIRQCIPACRKPFSYCTQGG |
| | | 1 | | | | VCGCEKGYTEIMKSNGFLDYC |
| | | 1 | | | | MKVPGSEDKKADVKNLSGKNR |
| | | ļ | **** | | | PVNSKIHDIFKGWSLQPLDP |
| 5055 | 35423 | Α | 5096 | 1 | 519 | |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 5056 | 35424 | A | 5097 | I | 743 | MCPAIDAVLVYVNRKWTNLSD |
| 5050 | 33.2. | ľ. | 3077 | 1. | 1 | PMPVGQMGTVKYVLMSAPATI |
| | | 1 | | | | ASYIQLDFSPVVQQQKGKTIKL |
| | | 1 | | | | ADAGEALTFP/RGVMPKA/PPOL |
| | | | | | | LVPATFLSAELALLOKSFHVNI |
| | | 1 | | | | QDTMIGELPPQTTKTLARFIPEV |
| | | 1 | | | | AVAYPKSKPLTTOIKIKKPPKV |
| | | | | l . | | AMKTGKSLLHLHSTLEMFAAR |
| | l | | | | | WRRKAPMSLFLLEEHFNLKGO |
| | | 1 | | | 1 | HSLHENQLQMATSLDRRGN/YT |
| | | 1 | | | | GFITSYLEEAYIPVVNDVLOVG |
| | | 1 | | | 1 | LPLPDFLAMNY |
| 5057 | 35425 | A | 5098 | 2327 | 3435 | KTTTLEDNLGNTIQDIGPGKDF |
| 5057 | 33423 | ľ. | 3050 | 1227 | 3 .55 | MMKIPKANATKIKIDEWDLIKL |
| | | ŀ | | | | KSFCTAKATTKRVNKQDESLRS |
| | İ | | | ł | | HYE*WGMLTDCVVMRDPNTK |
| | | 1 | | | | RSRGCGFVTYATVEEVDAATN |
| | | | | | | ARPHKVDGKVVEPKRTVSRED |
| | | | | | | SORPGAHLTVKKIFVGGIKEDT |
| | | | | | | EGFAFVTFDDHDSVDKIVIPKY |
| | | 1 | | | 1 | HTVNGHNCEVRKALSKQEMAS |
| | | | | | | ASSSORGRSGRGGGGGGNENFO |
| | | | | | | CGGNFSGHGGFGGSHDGGGYG |
| | | | | | | GSGDGYNGFGNDGGYPGGGPG |
| | l | | | | 1 | YSGGSRGYGSGGGGCGNODSG |
| | | ĺ | | | | YGRSGSYDSCNKGGRGGFGSG |
| | | | | | | SGSNFGGGGSYNDFGNYNNQY |
| | | | | | | SNFGPMKGGNF/GGRRSGP*GD |
| | | | | | | GGQYFAKPPNHSGYGGSSSSSS |
| 5058 | 35426 | Α | 5099 | lı . | 636 | MRDPNTKRSRGFGFVTCATVE |
| | | | | | 1 | EVDAAMNARPCKVVGRTVEPK |
| | | | | | | RAVSREDSQRPEDTEELHLRDY |
| | | | | | | FEQYGKIEVIEIMTDQGSGKKR |
| i | | 1 | | | | GFAFVTFDNHDSMDKTVIQKY |
| | | | | | | HTVNGHNCEARKALSKQEMAR |
| | | | | | | ASSSQRGRSGSGNFGGGRGGGF |
| | | | | | | GGNDNFGRGGNFSGHGGFGGS |
| | | i | | | | HGGGGYGG/SGDGYNGFGNDG |
| | | 1 | | | | GGGSYNDFVNYNNQSSHFGPM |
| 5059 | 35427 | Α | 5100 | 1 | 3622 | MTGICYTEDERSYKKNAQPTA |
| | | | | | | ASKKQKETQKFCLRVDGQQKV |
| | | 1 | | | | KLSVLQEKSAQLTVQLKSQKFL |
| | | 1 | | | | GHPTAGRGRSELCLDLPDPPED |
| | | | | | | PVALETRSVGTWVRERDLGMP |
| | 1 | 1 | i | | | DGEAALAAKVAVLETQLKKAL |
| | 1 | 1 | | | 1 | QELQAAQARQADPQPQAWPPP |
| 1 | l | 1 | | | | DSPVRVDTVRVVEGPREVEVV |
| | | 1 | l | | | ASTAAGAPAQRAQSLEPYGTG |
| | | 1 | l | 1 | | LRALAMPGRPESPPVFRSQEVV |
| | | | | 1 | | ETMCPVPAAATSNVHMVKKISI |
| | 1 | 1 | 1 | 1 | I | TERSCDGAAEMKWEDQNIGD |

| SEO ID | SEO ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|----------|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 1 | | | | sequence | | |
| | | | | | | |
| 5060 | 35428 | A | 5101 | 1 | 782 | MRRRLQLDSLLHPPSCFSSTLK |
| 1 | | | | | | CGKAAAAACDSSDQIQERLQT |
| 1 | | 1 | | | | GHLPCEASHTICPPNHHSQSTLR |
| | | | | | i | PPLPPP\HNHTLSHHHSSANSLN |
| 1 | | | l | | | RNSLTNRRSQIHAPAPAPNDLA |
| | 1 | | | | | TTPESVQLQDSWVLNSNVPLET |
| 1 | | | | | | RFWCCQRFLVFPGLQLQHLTLS |
| | 1 | | | | ŀ | LPVWSHGALPVSLCIFTWLSSH |
| İ | | | | | | KDTSHFGLRVHLLSLPLEAKYS |
| | | | | | | FYPGCPVLEPAPNPLKGPWCLW |
| | | | | | | GVGTFRRYCTTFLFNESEPKDL |
| | | | | | | VGEKFKSDRLCREAHLQE |
| 5061 | 35429 | A | 5102 | 3 | 1864 | |
| 5062 | 35430 | В | 5103 | 1 | 525 | |
| 5063 | 35431 | Α | 5104 | 2 | 351 | RPAVGAEKSNPSKRHRDRL\NA |
| | | | | _ | | E\LDHLASLLPFPPDIISKLDKLS |
| | | | İ | | | VLRLSVSYLRVKSFFQVKRQRR |
| | | | | | | EIHGRNCOKKRNONLKDRGWO |
| | | | | | | WOMPKMWMTTRANEGPCRSG |
| | l | | ĺ | | | GPEHWTPRP |
| 5064 | 35432 | A | 5105 | 1 | 375 | RPLOKORPAVGAEKSNPSKRHR |
| 3007 | 33432 | ^ | 3103 | ľ | | DRLNAELDHL\ASLLPFPPDIISK |
| 1 | | | Ì | | | LDKLSVLRLSVSYLGVKSFFQG |
| | | | | 1 | | QGLAVADAEDVDDHTGERRP |
| | | | | | | MSFRRPRALDTOALRRTOFGLH |
| 1 | | | | | | LLMVNIAGLIATDRL |
| 5065 | 35433 | A | 5106 | 407 | 910 | NVTPAHYDEQQNFFAQIKGYIR |
| 15005 | 33433 | ^ | 3100 | l***/ | 310 | CILFPPDQFECLYPYPVHHPCYR |
| 1 | | | | | | QSQV*LDNPDYERFPNFQNVVG |
| 1 | | | | İ | | YETVVGPGDVLYIPMYWWHHI |
| | | | 1 | | | ESLLNGGITITVNFWYKGAPTP |
| | | | | | | KRIEYPLKAHNKVAIMKNIEKM |
| | | | | | | LGEALGNPQEVGPLLNTMIKGP |
| | | | | | | IOLACOGSRPPAR |
| 7077 | 35434 | - | 5107 | 237 | 908 | |
| 5066 | 33434 | A | 3107 | 237 | 908 | HEKPGRQRETRSQNHHHHHHH |
| | | | | | | HHHHQEKIRIQTFTERP*EDTER |
| | | | | | | SDCPQAKKRSPRRNQPC*HLDF |
| | | | | | | ELPAARAATQPVNSGARAGRA |
| | | 1 | : | | | GATVPRHTATLLLLHQRRDYA |
| 1 | | | | | | GGSLCDIDRAPDAKQGGKS*ES |
| | | | | | | ETD\$RFWKGTVC*DHTAGWVH |
| | | [| | l | | GRPTTPHHSSPDSRNGGFQLHQ |
| 1 | | 1 | | l | | QIALAAGWREGASRPKQEPLQP |
| | | | | l | | GPEQGQRRGRREPVQGKAPSG |
| L | | <u>_</u> | | | | HQSWPAE |
| | | _ | | | | |

| SEQ ID | SEQ ID NO: | | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X-Unknown, |
|--------|------------|-----|------------|-------------------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 5067 | 35435 | Α | 5108 | 57 | 873 | SGLCTAAFHHQMEVVHT*SVSS |
| | | 1 | | | | RS*R\PTTPVIAQWAHEQSGHG |
| | | l | ŀ | | | GRHGGYAWTQQHGLPLTKAD |
| | | | | | | LAMATAECPICQQQKPTLSPRY |
| | | | | | | GTIPQGDQPATWWQVDYIGPL |
| | | | | | | ASRKGQRYGFAYLARNVSAKT |
| | | | | | | TIHGLMECLIHHHGIPHIIASDQ |
| | | 1 | | | | GTHFVAKEVRQWAHAHGIHW |
| | | | | | | FHHVAYHPEAGGLTEWWNGL |
| | | 1 | | | | LKSQLQRQLGDNTLQDWGKVP |
| | | | | | | QKAMYALIQCPIYGIVSPIARIH |
| | | | | | | RSRNQGVKVEMAPFTITPSDPL |
| | | | | | | AKCLLPVLVTLRSAGL |
| 5068 | 35436 | Α | 5109 | 1 | 311 | QITMQPELPIMNWVLSVPSSHK |
| | | | | | | MGHAQQH\QEVAQMPRVSTPA |
| | 1 | | | | | TLPSLPQPALMAPWTVPYDQL |
| | 1 | | | | | MEEEKARARYAGTIQKWTAAA |
| | | | | | | LQPLSRTSLKDSGEGTSKW |
| 5069 | 35437 | Α | 5110 | 3 | 591 | DPADPMVLEVSEADRDA\VPIS |
| | | | ŀ | | | ESQQRPLGFWSKALPSSANNYS |
| | 1 | | | | | FFKRQLLACYWVLVEIEHLTM |
| | | l | | | | GHQVTMRPELPIINCVLSDPCSH |
| | | | | | ' | KVGHAQQHSIIKWRWYIHDWA |
| | | | | | | EGTSKI.HEEVAQIPMVSTPSLP |
| | | | l | | | QPAPMASWEVPYDQLTEEEKT |
| | | | l | | | RAWFTDGSARHAGATQKWTA |
| | | | | | | VALQPLSGTSLQDSSEEKSSQW |
| 5070 | 35438 | Α | 5111 | 1 | 582 | |
| 5071 | 35439 | Α | 5112 | 1 | 635 | |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown. |
|--------|------------|----------------|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *-Stop codon, /-possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 5072 | 35440 | A | 5113 | 2 | 1538 | FFPIGFWRQHIPRLSVLLOHIY* |
| | | | | | | VT*KAASFEWGPKOEKAL*OV |
| | | | | | | QAVVQVALPLGPYDPADPMLL |
| | | | | | | EVSVADKDAGCSLWOAPIGES |
| | | | | | | QWRSLGFRSKALPSSADNYSSF |
| | | | | | | ERQLLACYWALVETECLTLGH |
| | | | | | | QVTT*PELPIMNWVLSDPSSHKV |
| | | ı | | 1 | | GHEQQHSIIKWRWYICDWAVV |
| | | | | | | GRESTTNGLAGWSETWKKHH |
| | | | | | | WEMGEKQIWGRSMWMELSEW |
| | | 1 | | | | SKTVKIFVSYVSAHQCVTSTEE |
| | | | | | | DFNNQWDGMTCSVDTTHPLSL |
| | ì | | | | | TTSVIAKWAHEQSDHGGRYGG |
| | | | | | | YAGAQQHGLPLTKADLAMTTA |
| | | l | | l | | ECPICQQQRPSLSPQYGTISQGD |
| | | | | | | QPATWWQVDYIGPLPSWKGQR |
| | 1 | ŀ | | ļ | | FVLTVIDTYSGYGFAYPEHNTS |
| | 1 | l | | İ | | AKTTVNGPMECLIHRHGIPHGI |
| ŀ | | 1 | | | | ASDQGTRFTAKEVWQWAHAH |
| ł | 1 | | | | | GIHWFYYVPHHPEAAGLIGWW |
| | l | l | | 1 | | NGLLKSQLQCQLGDNTLQGWG |
| | | ł | | | | KVLQKAVCALNQHPIYGTVSP |
| | ŀ | | | | | VARIHGSRNQGVEVEVAPFIITS |
| | | | | | | SDRLAKFLLPVSSTSCSAGL |
| 5073 | 35441 | A | 5114 | 488 | 966 | ILVGSKGQSVCPGPSSSGTRGSS |
| ĺ | ì | | | | | SPGVAVSNKAAATVGPQ*VTQ |
| ĺ | | l | | İ | | QEGGPGSRQRTRAGSPELVPAG |
| | | l | | | 1 | PSAVEGEEGSWTPGGPQVPRKR |
| | | | | l | | SAAPSRQR*HWLRCTPA*QRRG |
| | | | | | | DWPRAAGRCHAARPPAAGSRA |
| l | 1 | | | | | PTKISARPTRISRLGPRAASKAQ |
| 5074 | 25112 | ļ. | 2112 | 197 | 421 | RLQRL KLKATMNSFHKS*SCALVSTRP |
| 30/4 | 35442 | A | 5115 | 197 | 421 | |
| l | | 1 | | | | CSPRGDPRATLTTIPALVEPPCG |
| 1 | | ı | | | | TQDPKMA AEAPQRPGKRLGRN LLTRRRPT |
| 5075 | 35443 | A | 5116 | 3 | 5649 | LLEKLRQRIHDKAVALERAIDE |
| 13073 | 33443 | l ^A | 3110 | 3 | 3049 | KFSALEEKEKELRQLRLAVRER |
| l | | 1 | | | | DHDLERLRDVLSSNEATMQSM |
| | | 1 | | | | ESLLRAKGLEVEQLSTTCQNLQ |
| | | ı | | | | WLKEEMETKFSR WOKEQESIIO |
| 1 | | 1 | | | ŀ | QLQTSLHDRNKEVEDLSATLLC |
| | | 1 | | | | KLGPGQSEIAEELCQRLQRKER |
| l | | l | | | | MLQDLLSDRNKQVLEHEMEIQ |
| | | | | | | GLLQSVSTREQESQAAAEKLVQ |
| | 1 | 1 | | 1 | | ALMERNSELQALRQYLGGRDS |
| l | 1 | 1 | | 1 | | LMSQAPISNQQAEVTPTGRLGK |
| | | l | | | | OTDOGSMOIPSRDDST |
| 5076 | 35444 | A | 5117 | 2 | 157 | YLGRHLCLFSEHEEHSSRKEMV |
| 30/0 | 33444 | ^ | 2117 | ľ | l''' | LVEGLCSEQGRRG*TLASSSER |
| ĺ | | | | 1 | | KPLENER |
| | | <u></u> | | L | L | KI LLIVER |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X-Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nuclcotide |
| | sequence | 1 | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 5077 | 35445 | A | 5118 | 248 | 621 | TDEPSLLSHTFCPKGALLSACSG |
| | | l., | | Ī | | ACPLSSGTQAGMPPSTEALOPC |
| | | | | ı | | RGLTVPHQ/LG*RPQGMLWWK |
| | | | | ı | | ALAADWSVEWOKGRRGLGKA |
| ł | 1 | | | | | LSVTSRTGRLLCR*GSAEAAAS |
| 1 | | | | | | PLAASPRRSSRALGAGIP |
| 5078 | 35446 | A | 5119 | 2 | 157 | YLGRHLCLFSEHEEHSSRKEMV |
| 30,0 | 55.110 | Ι. | | | | LVEGLCSEQGRRG*TLASSSER |
| | | 1 | | | | KPLENER |
| 5079 | 35447 | В | 5120 | 125 | 994 | |
| 5080 | 35448 | Α | 5121 | 1 | 550 | RRYRPRRVQDPGGPAEAERGPP |
| ŀ | 1 | | | ĺ | | RRLLNARVHVCRAEASERAPGF |
| | | ŀ | | l | | CGRVSAHVERARDPRLE*QLED |
| | | l | | | 1 | KAAPRQDFTQQLRGPEKQHRM |
| | | 1 | | | | VWQEKEDMHKQLVEASETLKS |
| | | 1 | 1 | 1 | | QAKELKDAHQQQKLALQEFLE |
| | | 1 | | ł | | LNELMAELYSQKQKVWDKEEE |
| | | 1 | | i | | MEVAMOKADMMWQEI*RSKK |
| | | | | | | LRKRMLFSQMRWL |
| 5081 | 35449 | A | 5122 | 135 | 638 | GSFPGPAPLGQTLVTLGLAWQS |
| | | 1 | | | | SGWILRGWLVPPRAKCSPRGO |
| | 1 | | | | | ALAICLSLRGLGARSTWAETRP |
| | 1 | | | | | OGPRGSLASLCPAHMDLSIWKT |
| | | | | | | GDGGPRSAFSKVHQGSLNTFG |
| | | ŀ | | | | VDTAARRLSQARTAPSPSV\SAP |
| | | l | | | | SSAAAPASAGPPPAPGAPPTPA |
| 1 | | 1 | | | | OALRPAPPSPRPAER |
| 5082 | 35450 | Α | 5123 | 193 | 610 | VGELLPFRFKISLRPFLALCLSSL |
| | | 1 | | | | GPCRQPHSGSVPA*NPLLGPRA |
| | | 1 | | ŀ | | KSSPHSGCGLAPFAIPELLRRLP |
| | | 1 | | | | LEGSAHCPAPEGAASPPTSWDS |
| | | | | | | ADPPCRETSIFAPPRVVLTPGPS |
| | | | 1 | | İ | APQASPSQPLLFLTPRWDRLPES |
| | | 1 | 1 | | | VL |
| 5083 | 35451 | Α | 5124 | 2446 | 2630 | VGFFFFFWWGERGTGSYSVTQ |
| | | | | | | ARVQ*YDLGSLQLLPPSFKGFS |
| | | | | 1 | | CLSLPGSWYYRHGPPRLG |
| 5084 | 35452 | Α | 5125 | 3 | 710 | EDGDWDQRRGGEAGDQDQRR |
| | | | | | | GGEDEDQDQRRGGEDGNRDQ |
| 1 | | 1 | | | | KRDGENGDWDWKREDENKDQ |
| 1 | 1 | 1 | | | | DEKREGEDGNQDQRRGGEDGD |
| 1 | | 1 | | | 1 | QDQRRGGEDGNQDQRRGGKD |
| 1 | | 1 | | | 1 | GDQDQGRGGEDGDQDQGREG |
| 1 | | 1 | | | | EDGDQEQRRRGEDGE*DQRRG |
| | 1 | 1 | | I | 1 | GEDGGODOKRGGEDGNODWS |
| | | 1 | 1 | | 1 | REGEDRD*HWRRGGEVGE*DQ |
| | | 1 | | | 1 | RRGGEDGE*GORRGSEDGDWD |
| | | 1 | | | 1 | RSRGGEDGDQDQRSVGHLCHS |
| 1 | | ŀ | 1 | | 1 | OGPPASGCVS |
| | | | | J | L | 1400000 |

| SEQ ID NO: | SEQ ID NO: nf peptide scquence | | SEQ ID NO: in USSN 09/540,217 | Nucleotide location of first codon for peptide sequence | | Amino acid sequence (X=Unknown, ^=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
|---------------|--------------------------------------|---|-------------------------------------|--|------|--|
| 5085 | 35453 | Α | 5126 | 506 | 882 | RCSGQGFDGNKGTKALPTISA DTTRCWRTLRVTQMTCRFRRF KAFFIGIMSCGRTGRILFPPCSS MSWIPCRAKNS*GNVISQSPSK NR/WQIMMVIQLLNFYLPGDFV SFRIMLKGNWEVTRTRG |
| 5086 | 35454 | A | 5127 | 107 | 1327 | ERRKRAVGGFDLVLGEQPSDKI FR*VIV*GLALWLPLSKSFVIPP AELAINPSAKCKTDMTVMEDA VEVR*VWLQD*GLDSLEVLLDS FGPVRDCSKDNGGCSKNFRCIS DRKLDSTGCVVGLPCKLVVDS SGCYDRHIGVDCSDGFNGGCE CUCLQQMAPFDDPTLYNILMF CG*VELPARPLDGRSCQLITETC PBGSDCGESRELPMNQTLFGEM FGYNNLSKEVAAGQVLKGT R*TSYT*N*YQQLPDGLVVATV PLENQCLEEISEPTPDPDFLTGE CAFSTLFGYPVLQHWKVRSVM YHIKLINQVAISQGEHCCRLSCD GATSRADFVALLDQFGNHYIQE AIYGFESCSIWYPNKQVQRL WLEYEDISKGEWHACWQILSTF PWIVISLHNCLP |
| 5087 | 35455 | Α | 5128 | 3 | 23 | FYSAFLVADKVIVTSKHNNDTQ HIWESDSNEFSVIADPRGNTLG RGTTIT*VSIPPSL |

604

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| i | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| - | | | | sequence | | |
| 5088 | 35456 | A | 5129 | 1 | 2462 | MRALWVLGLCCVLLTFGSVRA |
| 3000 | 33430 | ^ | 3129 | l' | 2402 | DDEVDVDGTVEEDLGKSREGS |
| | | ŀ | | | | RTDDEVVQREEEAIQLDGLNAS |
| | | | | | | QIRELREKSEKFAFQAEVNRM |
| | | 1 | | | | MKLIIHSLL*NKGIFLERLISNSS |
| | | l | | | | C\ALDRLSLISLTDENALSVNE* |
| | ĺ | | | | | LTVN\KCDKEKNLLHVOHTGV |
| | | l | | | | |
| | | | | | | GMT\REELVKN\LGTIAQIWDQ |
| | | l | | | | ASFLNKMP*SHRKMGPVNLPEL |
| | | l | | | | IGPVWVSGFLFPPSLVADKVIVT |
| 1 | | l | | | | SKHKQPIPQHIWGVWTPNGIFL |
| | | | | | | *LLDPRGKHS*DRGNRQFTLCP |
| | | | | | | *KEEASDLPWNLDTIKNLRQKN |
| 1 | | l | | | | IHSFIKLFLIYVW\SSKTETV*GA |
| | | ı | | | | PWGEEEAAKEEKEESDDEAA\V |
| 1 | | 1 | | | | EEEEEEKKPKTKKVEKTVWDW |
| | İ | 1 | | | | ELMNDIKPIWQRPSKEVEEDEY |
| | | ı | | | | KAFYKSFSKESDDPMAYIHFTA |
| | | | | | | EGEVTFKSILFVPTSAPRGLFDE |
| İ | | 1 | | | | YGSKKSDYIKLYVRRVFITDDF |
| | | 1 | | 1 | | HDMMPKYLNFVKGVVDSDDL |
| ŀ | | I | - | | | PLNVSRETLQQHKLLKVIRKKL |
| ŀ | | l | | | | VRKTLDMIKKIADDKYNDTFW |
| | | l | | | | KEFGTNIKLGVIEDHSNRTRLA |
| ŀ | | l | | | | KLLRFQSSHHPTDITSLDQYVE |
| | 1 | i | | | | RMKEKQDKIYFMAGSSRKEAE |
| | | l | | | | SSPFVERLLKKGYEVIYLTEPVD |
| | | 1 | | | | EYCIQALPEFDGKRFQNVAKEG |
| 1 | | 1 | | | | VKFDESEKTKESREAVEKEFEP |
| | | 1 | | | | LLNWMKDKALKDKIEKAVVSQ |
| | | 1 | | | | RLTESPCALVASQYGWSGNME |
| | | 1 | | | | RIMKAQAYQTGKDISTNYYAS |
| 5089 | 35457 | Α | 5130 | 45 | 416 | RWGLAMFPSLDNKSETLSQKK |
| | | 1 | | | | KKKDLCPHISFEMDLTTADAR |
| 1 | | ı | | | | WVQDAATRLLATTRCPPNSRG |
| ı | | | | | | SR**ISWRAGCCPGGWAGPHW |
| | | l | | | | GHDGCL*PSCVSSS |
| 5090 | 35458 | Α | 5131 | 3 | 477 | GRLPRHRGGEPGAAQPAGRQP |
| | | ŀ | | | | RGGAAATAAGAPRAGGGAAA |
| | | | | | | GNARRCREAAARDPHHGEGSG |
| | | | | | | PEPSQCEGAAHQRAGRAQGD* |
| | | l | 1 | l | | GGSGATGEGGRRGHDSHNPLG |
| | | 1 | | I | | RVRGSTLPPS**N*VGL*VPSWP |
| 1 | 1 | | | I | | OCGPAHPPGOHPALOEIHORLP |
| 1 | l | | l | I | | LESGGHRVV |
| | L | _ | | | | DD000int. |

| SEO ID | SEO ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | 1 | | | | |
| 5091 | 35459 | Α | 5132 | 3 | 446 | RTGSWGWSASQQRHRKDRGL |
| | | 1 | | | \ | DSAGSGWVSHILPVPAPPPADA |
| | l | 1 | | | | RPSASRWRRQGSHPLPGRTECP |
| | 1 | 1 | | | | SVQPLCLPPPAGHHRNHSIASPS |
| | 1 | 1 | | | | QTPPPRSLPGSQDKSLFLPRDRR |
| | | l | | | l | TGEGEGHMN*APLSAPGTSCRS |
| | | 1 | | | | GGSTSWLPEILGPTQ |
| 5092 | 35460 | Α | 5133 | 352 | 588 | DIFKVGGCFLFKRLRCQQRFFL |
| | | 1 | | | İ | LIFSSSTQSA*RVSNGPYH*EIK |
| | | 1 | | | | MAVYYGELRKNGLIQESCDNIQ |
| | | 1 | | | | PRQGSFNMDSMQ |
| 5093 | 35461 | C | 5134 | 13 | 144 | |
| 5094 | 35462 | Α | 5135 | 587 | 1078 | LSQRFPLSSRIKLQRLSLQNGIP |
| | | | | | | QIKELDYLFRTNSNQINFNLLSH |
| | | | | | | RVRARPPAPPGRPNPSPGPDRPP |
| | | 1 | | | | EPPARAGSSRRGPGEPPRRQPQ |
| | | 1 | | | | RRFRRRGPDRPGRLSRGL*RRR |
| | 1 | 1 | | | | ARPASPQPRQHHSRGPAGRPGV |
| | | 1 | | | | APRRPAGLAAAAERLTARGAA |
| | | | | | | ASPAIPRA |
| 5095 | 35463 | Α | 5136 | 44 | 455 | HLRNRTR/PSQITPHIYNHLIFDK |
| | | l | | | | /PLFNIWWWENWLAICRKLKLD |
| | 1 | l | | | | PFLTPYTKINSRWIKD*NIRPKSI |
| | | | | | | KNLEENLGNTIQHLG/IGKDFM |
| | | 1 | | | | TKTPKAMATKAKIDIWDLIKLK |
| | 1 | 1 | | | i e | SFCTAKETIIRVNRLPT*WEKIF |
| | | | | | | AIYP |
| 5096 | 35464 | Α | 5137 | 101 | 861 | LIGYQPKMSRTRRIHSRILPERIK |
| | | | | | | YLGSQLIRDVKDLLKENYKPLL |
| | ļ | | | | İ | NEIKEDTNKWKNIPCSWIGRISI |
| | | | | | | VKMAIL/PQAICGKLKLDPFLTP |
| | | 1 | | | | YTKINSRWIKDLNVGPTTIKTLE |
| | | i | | | l | ENLGNTIQAIGMGEDFMTKTPK |
| 1 | | 1 | | | ŀ | AMATKAKIDKWDLIKLKSFCT |
| | 1 | 1 | | 1 | | AKETTIRVNRQPTEWENIFTIYP |
| | | 1 | | | i | SDKGLISRIYKELNQIYKKK\TR |
| | | 1 | | | | NPIKK*VRDMNRHFSKEDIYAA |
| 1 | | l | 1 | | | HRHMKKCSSLLDIREMQIKTTM |
| | | | | | | RYHLTPI |
| 5097 | 35465 | Α | 5138 | 3 | 314 | LKSFCMAKETTIRVNR*PTEWE |
| | | l | | | | NIFAIYPSEKGLIYRIYNEATNK |
| | | 1 | | | I | DLVRRSGPLKTPKKKSQLTVLN |
| | 1 | 1 | 1 | | 1 | LVTFKRTPALSEEKESAQVLWQ |
| | | ĺ | | | | FKKPECVLTSKRVH |
| | | | | 1 | | |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 5098 | 35466 | Α | 5139 | 1 | 1278 | MNIDAKILNKILANRIQQHIKKL |
| | | | | | | IHHDOVGFIPEMOGWVNICKSI |
| | | | | | | NIIOHINRTKOKNHMIISIDAEK |
| ļ | | | | | į. | AFDKIQQRFMLKTLNKLGIDGT |
| | | | | | | YLKIIRAIYDKPTANIILNGOKL |
| l | | | | | | EAFPLKTGTRQGCPLSPLLFNIV |
| | | | | | | LEVLARAIMOEKEIKGIOLGKE |
| 1 | | | | | | EVKLSLFADDMIVYLENPIVSA |
| | | | | | | RNLLKLISNFSKVSGYKINVOK |
| | į. | | | | | SOTFLHTNNRQRESQIMSELPFT |
| 1 | | | | | | IASKRIKYLEIQLTRDVKDLFKE |
| | | | | | | NYKPLLN |
| 5099 | 35467 | A | 5140 | 1 | 430 | GGVFFLRTPTDCCGMLQGAAG |
| | 1 | | | | | STGFYASEARPRGPACSLDRGS |
| | | | | | | SSLLSWGLHQDPLFPAAKQHRR |
| | | 1 | | | | EAGRADONSPRPRLSTG*OTPT |
| | | ı | | | | L*RRPAAATGRRRAQPPRATSV |
| | | l | | | | SAPASPPCPRARPPHHARPPRVL |
| | | | | | | ACQP*ATAPGP |
| 5100 | 35468 | Α | 5141 | 1 | 346 | |
| 5101 | 35469 | Α | 5142 | 3 | 1336 | |
| 5102 | 35470 | Α | 5143 | 5 | 283 | |
| 5103 | 35471 | Α | 5144 | 1 | 1368 | |
| 5104 | 35472 | В | 5145 | 1 | 838 | |
| 5105 | 35473 | Α | 5146 | 1 | 962 | |
| 5106 | 35474 | Α | 5147 | 19 | 87 | |
| 5107 | 35475 | A | 5148 | 41 | 83 I | GLQNPKHQSSQLVDLKMKKSL |
| | i | | | | | LQCMFQYLIVLQ*YLK*YLGTQ |
| | | 1 | | l | | LTRDVKDLFKENYKPLLKEIKE |
| | 1 | 1 | | l | | DTNKWKNIPCSWIGRINIVKMA |
| | 1 | | | | | ILPKDPTTAQLSPRGSTAQKGH |
| 1 | | 1 | | l | | WRPCPLPPRGVPRSPRGPTSHP |
| | I | | | 1 | | HHDPCPGGAPVRNTGSERWQR |
| | 1 | | 1 | | | KLRSGPKSDWAGRAQAPSLGE |
| 1 | | | | | 1 | GGAKNGKSHPGSHRAFSLPRAP |
| 1 | | | | | | RRLGPGSQPGRFRGFLKQARGR |
| l | | | | | | AGEGHSAILLAPESPNAQVSNV |
| 1 | 1 | 1 | 1 | | 1 | TSATYRSNLSGLPRPCSVVLLG |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nuclentide | Nucleotide location of last | Aminn acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | |
| | sequence | ı | 09/540,217 | codon for peptide | of peptide sequence | deletinn, \=possible nucleotide insertion) |
| | | | | sequence | 1 | |
| 5108 | 35476 | Ā | 5149 | li | 2233 | MKAEIKTFFETNENKDTTYONI |
| | | | | | 1 | WDAFKAVCRGKFTALNAHKR |
| | | | | | I | KQERSKIDTLTSQLKELEKQEQ |
| | | 1 | | | | THSKASRRQEITKIRAELKEIET |
| | | | | | | OKALOKINESRSWCFEKIHKID |
| | | 1 | | | | RPLARLIKKKREKNOIDAIKND |
| | | | | | | KGDITTOPTEIQTTIREYYKHLY |
| | | | | | | ANKLENLEEMDKFLDTYTLPRI |
| | | 1 | | | | NQEEVESLNRPITGSEIVAIINSL |
| | | | | | | PTKNSPGPDGFTAEFYQRYKEE |
| | | | | | 1 | LRIKYLGIQLTRDVKDL\FKENY |
| | | 1 | | | | KPLLNEIK\EDTNKWKNIPCSW |
| | | | | | | VGRINIVKMAILAQGNL*IYKFI |
| 1 | | | | | | AISIKLPFTFFIGL/EKNLTFKFIW |
| | | | | | | \NQKRS\RIAKSILSOKNKAG\GI |
| | 1 | | | - | į. | TLPDFQTITYKATVTKTA\WYW |
| | | | | | | YQNRDIDQWNRTEPSEITPHIY |
| ì | | ŀ | | | | ILI\F\DKPEKNKHGGKASL\FIK |
| | | | | | | W\CW\ENWLA\ICRKLKLDPFLT |
| | | | | | | PYTTINSRWIKDLNLRCQIIKTL |
| | | | | | | EENLONTIQDTDIGKDFMTKTP |
| | 1 | | | | | KAMATKAKIDKWDLIKLKSFC |
| | 1 | | | | | TAKETTIRVNRQPIEREKIFAIYF |
| | | | | | 1 | SDKGLISKIYKELKQIYKKKNK |
| | | | | | | QPHQKVGEGYEQILLKRRHLCS |
| l | | | | | | QQTHESMAHHHWPCREMQINT |
| | 1 | | | | | TMRYHLTPVRMAIIKKSGNNRO |
| | | | | | | WRGCGEIGTLLHCWWDCKLV |
| | | | | | | QPLWKSVWRFLRDLELEIPFDP |
| | | | | | | AIPLLGIYPNDYKSCCYKDTCT |
| | | | | 1 | | RMFIAALFTIAKTWNQPKCPTM |
| | | | | | | IDWIKKMWHIYTMEYYAAIKIE |
| 5109 | 35477 | Α | 5150 | 1390 | 3491 | DLLTRTACAVPGWGCSSRATC |
| | | 1 | | | | QARGWRLLSSPPHPSGVQPLLC |
| | | 1 | | | | HLPYPPSPFSLLSNLTPFLRAFPF |
| i | | | | | | SLETS*KWART/WPGAVAHAC |
| | | | | | | NPSSLGGRGRWIT*GREFETNL |
| | | | | | | TNMEKPCLY |
| 5110 | 35478 | A | 5151 | 310 | 445 | YLTKIWPGAVAHTCNPSTLGGF |
| | | | | | | GGWIT*GQEFETSLANMVKPHI |
| | | | | | | Υ |
| 5111 | 35479 | A | 5152 | 44 | 1132 | PQVIHPPRAPKLLELQEPPRWIH |
| | | 1 | | | | DLNQDTPSALCQH*RTC*HRAE |
| | | 1 | l | | | GVSWFKSWIHLGGSCNSSSLGA |
| | | _ | | | | RGGWIT*GQEFETSLTNMAKPH |
| 5112 | 35480 | C | 5153 | 183 | 323 | |
| 5113 | 35481 | В | 5154 | 504 | 2474 | |
| 5114 | 35482 | С | 5155 | 66 | 269 | |
| 5115 | 35483 | В | 5156 | 2414 | 3096 | L |

| SEO ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|----------|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| | | <u> </u> | | | | |
| 5116 | 35484 | A | 5157 | 9 | 239 | нннүсүннннннннннн |
| | | | ŀ | | | LPAPCRNLRV*PVCFRYKLWFH |
| | 1 | 1 | | | | YGKQHLLFLDFLLSHSEWCEM |
| | | | | | | VSHCGFDLHFSDD |
| 5117 | 35485 | A | 5158 | 3 | 387 | TDTKPLSCSSCPPRGKKPVSHR |
| | | ŀ | | | | DQ*RRWGRRCRGEPGTEACWS |
| | | ŀ | l | | | AGALQF*KPRSRGGRTSKMTSG |
| | | 1 | | | | PSAEKGGG*AGRKPGRRHFGRR |
| | İ | l | | | | VLRHSCVLPVARELWGRHGPC |
| | | | | | | GWROKNVPWKWSELLPVVAP |
| 5118 | 35486 | A | 5159 | 1 | 277 | MPPPPPPSESPGPGPVGSRLPPG |
| 151.10 | 55.00 | ľ. | , | ľ | | PAVTGNEKELRGNP*VGLAPPR |
| | | | | | | PRFRASRREGVTGKVHRPNRLO |
| | 1 | İ | | | | LRAPPKG*SDORGONVPPSEAK |
| | | | | | | SLC |
| 5119 | 35487 | Α | 5160 | 1 | 3285 | SEC |
| 5120 | 35488 | A | 5161 | 3 | 194 | IPLSLQSKEVGQQLQDDLMKVL |
| 3120 | 33466 | ^ | 3101 | ľ | 174 | NELYSVNOMGCLAL*OAEGSSI |
| İ | | 1 | | | i | WQLAAIVHQQQN*TPSWGQ |
| 5101 | 35489 | ١. | 61/0 | 520 | 844 | VOAPGKCHAOMPAPAAPVPLG |
| 5121 | 35489 | A | 5162 | 520 | 844 | |
| 1 | | 1 | | | | RSRNPGRLASAVPVSSLLRFLPF |
| 1 | | 1 | | | | LQPIPPSDILPLSFEAVPSSPAAE |
| | | | | | į . | SGLHPCTRRRKRARPSC*VPGL |
| | | | | | | LLSPQPHPPPHVWRKGIL |
| 5122 | 35490 | A | 5163 | 1 | 794 | FRGFLDRGDCAALPCTYPHSPC |
| | | | | | 1 | SH*GGNCLPSLLTRPCVKA*PQ |
| | 1 | 1 | | | | MSGRKSSMRRWRRQSRLTAGT |
| | | | | | | SS*TPTSSTMC*ALVGSSTWNC |
| | | | | | | MLQAGSTAPGAGTPGSRPTWS |
| | | l | | | | SSSTCSWTAPSGRARCACASSS |
| 1 | | | | | | SCAMSAARRGWTSPACWRRTS |
| | | 1 | | | | RAWWTTSSPACASSATASVAA |
| | | | | | | STASTWPAARTTGGTAESSARP |
| | | | | | | ARRASCTGSPARSCWRRRRPPT |
| | | | | | | PSPGRPAPPSRRTRRAQAGTSA |
| | | | | | | LSPGACFGPRSCC*SSTCSSLSV |
| | | | | | | APY |
| 5123 | 35491 | A | 5164 | 3 | 57 | RIGQGVPVVHS*VEGGPNVISIV |
| 1 | | | | ľ | | LEYLRDTPPVPVVVCDGSGRAS |
| | | 1 | | | | DILAFGHKYSEEGG*VKVFLWC |
| 1 | | 1 | | | ŀ | THKWKEDPM |
| 5124 | 35492 | A | 5165 | 1 | 1326 | THE WALLSTIN |
| 5125 | 35492 | A | 5166 | 2 | 337 | YSVTMTPGKLRTLCEIDWPALE |
| 13123 | 55495 | l^ | 3100 | * | 337 | VGWSSEGSLDRSLV*KVLCPEL |
| 1 | | l | l | 1 | 1 | |
| 1 | | ı | l | | | VPSGGFLVSLTSRMKPQTLTGS |
| | | 1 | l | | | VKVLKDGMSGVCSFRCSDVSR |
| | | | **** | 222 | 440 | VSSFWWVRGLAGWSTTLLRKL |
| 5126 | 35494 | С | 5167 | 339 | 548 | |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | ľ | | sequence | | |
| 5127 | 35495 | A | 5168 | 3 | 413 | SQAFLPAASRRERPPEPVDPKA |
| 12.2 | 150,000 | Ι., | 15.00 | 1 | | TDPRSGTRRLPPRLPCOWTTPE |
| | 1 | | | | | HSHTSQLNLSRAFPKEPNPAAT |
| | | | | ł | | O*NPSGASPRERPHARAGEDRN |
| | | 1 | | | | GEC*EGNGSRPDLEEEASTPRA |
| | | | | 1 | | SPTPSD*PLWLHPPRPLVLETPL |
| | | | | | | LOL |
| 5128 | 35496 | IA | 5169 | 3 | 479 | FLHSTHIYWAHSMHELLKTAV |
| | | | | · | | VSISGQCTSLNTESGIWGGVPE |
| | | | | | | NAR/CPPAEGTVPASLOPRDPPR |
| | | | | 1 | | LPGSH/ASLPSASPPSRHVTWPP |
| | 1 | | | 1 | | EP/EAAGPKPS*IRCRWPPAGAT |
| | 1 | | | | | TKANPKESGRLVESMLPLPKSR |
| | | | | | | SAPVTFSAFACSGLPERVHEVF |
| | 1 | | | | | RVGKLR |
| 5129 | 35497 | Α | 5170 | 81 | 329 | QSVSSPSWFPQFPVQVQKVPCY |
| | | | | | | OVYRGDLVV*KHVAPPPSLPSS |
| | 1 | 1 | | | | FSGHVRHDCFPFAFHDDRKFPE |
| | | | | | | ASPAMLPVSSLGPHYL |
| 5130 | 35498 | Α | 5171 | 335 | 467 | MPSTPTARKPESPEALARVESIA |
| | | | | | | CLPSPAP\PHECSPQASEETG |
| 5131 | 35499 | Α | 5172 | 1 | 2424 | |
| 5132 | 35500 | Α | 5173 | 2 | 304 | CLTKNTSATREKQVTELHRRSK |
| i | | | | 1 | | LQPEPAKTKALQTVIE*KDITLC |
| | | | | i . | | *VKEHLYIVACWALRLHLVFLP |
| | | 1 | | 1 | | TKAGISPALMKVSYPGKPLTLK |
| | | | | | | QLGRLV1LQEQ |
| 5133 | 35501 | Α | 5174 | 44 | 286 | GVQNGVEELILVRRMQKSPGP |
| | | 1 | | | | GEMESGSLEKEPLGTQTGPVPS |
| | | | | 1 | | EGTE*TQGPPRTPSLQTQGPQRT |
| | 1 | 1 | | 1 | | PSLQTQGPPNTPSL*TQGPLRTL |
| | | 1 | | | | SLQTQGPPNTPSLQTQGPPRTPS |
| | | | | | | LQTQGPQRTPSLQTQGPPNTPS |
| 5134 | 35502 | Α | 5175 | 206 | 384 | KRVFAHQADGRARSGFISSAGP |
| | | | | 1 | | GSQAGPGQGTG*QREDVEAAG |
| | | _ | | | | QPGSTAEGVRT*SDPG |
| 5135 | 35503 | Α | 5176 | 270 | 818 | RNERKPSQRTAVGLGAGQLQP |
| | į | 1 | | i . | | GQPGVQSEEPGPLEAGCAAGV |
| | | 1 | | } | | LPGPAEQDREGIYSK*KRVFAH |
| | | ŀ | | 1 | | QADGRARSGFISSAGPGSQAGP |
| | i | ŀ | | | | GQGTG*QREDVEAAGQPGSTA |
| | | ŀ | | | | EGVRT*SDPGSSHPAAAAFYEN |
| | 1 | 1 | | 1 | 1 | IQDGEALGRCGAKRTATAAP*Q |
| | 1 | 1 | | 1 | | RG*EGF*AGPTAAEKNEEGPPP |
| | | | | | | VFSLFNSHL |
| 5136 | 35504 | Α | 5177 | 122 | 436 | LTSLFSAISTKAKVSPLCSARAC |
| | | 1 | | | | SPSPAARAALGSPGFTC*GAGV |
| 1 | | 1 | | | 1 | APTPVPVAAPAPATAPATAVAA |
| 1 | 1 | | | | I | AATTTVVSAAMFTRRATRAAA |
| L | | L | | L | L | ATGA WGF VAGA PWPLQT |

| SEO ID | ISEO ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|-------------|----------------|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | Incation of first | codon for last amino acid | |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | 1 | | | sequence | | |
| 5137 | 35505 | IA. | 5178 | 20 | 1341 | MRRCVAAPLAHRW*OKLGLPG |
| 3137 | 33303 | ^ | 3176 | 20 | 1341 | CTPTVCSFLSPOPPPRARSSSAT |
| | | | | | i | |
| | | | | | | LSSGAPRRAATPQPQTTPPSSVQ |
| | | | | 1 | | PCAATPCARGGRPAPAGVTWP |
| | | | | | | TTRPSMA*RTS*ASTTAPRMAP |
| | | | | | i | PRSHACARSHRPETARSARTAP |
| | | | | | 1 | RSAITRRAFTSTRPPPTTRTVAS |
| | | 1 | | | 1 | SGTHTSGLSPTASRLARCRAPG |
| | | | | | | RSSTIIT*TCRSPTRLCCPAQRPL |
| | 1 | 1 | | | | PPASSPSSSRTSRSVWTRRCTRL |
| | | | | | l | RWTSSRPPSWMALRTVGTSTGF |
| | | | | | | TA*RSLRRCQASTWRSRPSTSA |
| | | | | | | PPSWCARWAAT*PLPSACQRK |
| | | 1 | | | | WSMLWRTGTARVSTSACGAAF |
| | | 1 | | | 1 | STSRSTSRPSTPMLRAPVPAGW |
| | | 1 | | | | QPPALHPQPPRPSHTRQPWPSA |
| | | | | | | RRSCRWRTCTTRPASSTSSPRA |
| | | | | | | T*TSHWPPTTRWRMSRCSTPTK |
| | | | | | | TNCTCMRGLGTCQAGRLRGCP |
| | | | | | | WPPGPSWAPWSRSWPCSLCSA |
| | | | | | | |
| 5138 | 35506 | Α | 5179 | 47 | 598 | ASGPASIVVLRQQFIKFFLDEICS |
| ľ | | | | | | LEERVWCRKLCLLYILWKEPR |
| | | 1 | | | | AVQAKSRCSDIRRELYRPVSLA |
| | l . | | | | | GLSGDFLRAGRYSAHTVNGAW |
| | | | | | | SAWTSWSQWA**SRGLLLALH |
| | 1 | | | | | NMLKIIIAFCSLQVATRIQSTFIS |
| | | | | | | SWHLSPSLLGSRSFSLYMSFGS |
| | | | | | | VLCPLFISHDTSSYSTKSFQSFSC |
| | | | | | | LGVW |
| 5139 | 35507 | Α | 5180 | 236 | 690 | LQNWSYLAEQCWNGGFIYLIM |
| | i | 1 | | | 1 | LRRFKHKAHSTYNGNSSNSSEP |
| | | 1 | | 1 | | GETPTL*LGDRTAKKGKRTRKF |
| | 1 | | | 1 | | GVISRPPANKAPEESKGSAGCE |
| | 1 | | | 1 | | VSSDPSTELENGPDPELGNGHV |
| | | | | 1 | | FQLENGPDSLKEVAGPHLERSE |
| | | | | 1 | | VDRGTEHRIPKTDAPLTTSN |
| 5140 | 35508 | Α | 5181 | 2 | 480 | WPFWAMVQRPSSAILCGPATLP |
| | | | | ł | | PNCRGACCARCRATGALSAYP |
| | | | | 1 | | AIHRPATRPPAPPAPGPLTSPPPL |
| | | | | | l | SVQNSNPDPLPSARPSPGPAAPR |
| | | | | 1 | | HARHSPSELPALTLSARGSSAL |
| | 1 | | | | i | CTKLKVEAAA*SCSASAWNWR |
| 1 | | | | | | LLPRNHVDSRCQPEPDGARARD |
| | L | | | 1 | | GRGP |
| 5141 | 35509 | Α | 5182 | 3 | 153 | |
| 5142 | 35510 | Α | 5183 | 3 | 239 | |
| 5143 | 35511 | A | 5184 | ! | 394 | |
| 5144 | 35512 | A B | 5185 | 84 | 435 2068 | |
| 5145 | 35513 | I _R | 5186 | 104 | 12008 | I |

| SEQ ID | | | SEQ ID NO: | | | Amino acid sequence (X=Unknown, |
|--------|------------|------------|------------|-------------------------------|---------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 5146 | 35514 | A | 5187 | 149 | 832 | DAGLSWREATRPGAPLHRPGC |
| | | | | | | QDASTQMTRPGDPGSSALFPLP |
| | | | | | | SP*PEREELPMSSRRSPKPELPG |
| | | | | | i | EACSRRPPTRPRPRTATRGPPLN |
| | | ĺ | | 1 | 1 | GRLPRARLPVSAGAGALGGGR |
| | | | | | | CRRRVAPRRVTPRLATRPSGVA |
| | | | | | | PRGSG*AATTKLSLAFGVTPLA |
| | | l | | | | LTPWSRTPFRKREERPPF*YPRP |
| | | l | | | | ATPEASPAHVENFRSNQTRYTS |
| | | | | | | AE*SGQQLERPSIAEISAQATVE |
| | | | | Ì | | PRSTI |
| 5147 | 35515 | A | 5188 | 45 | 312 | AEAQGGAEAEGHGGGGGPAPS |
| | | | | | | QGCPARAAGARGWQPAPSPQK |
| | | | | | | P\TPSDTTPPP\RTQPPVTQPCHP |
| ł | | | | | | VTQPPVTQPPVTQPRHPMKIPPP |
| | | | | | | G |
| 5148 | 35516 | Α | 5189 | 15 | 549 | PRHKEPESQAPGRRAPQAAAY |
| | | | | | | QQAASPAR*QGGSCSRCPPG*A |
| l | | 1 | | | | VEAAPAP*GQALGCVSQGPA*V |
| | | | | | | GPTRSPHPTAGLSRPHGPPSVRS |
| | | l | | | | TGWSPSSRPLQAQEAPWPVAPT |
| | | l | | | | HIPPPLDPGQPHSCGLGAGCQP |
| | | l | | | | RAPAARAGHP*EGAGPPPPPWP |
| | | 1 | | | | SASAPPCASAQPVLWLRFPRET |
| | | | | | | КТ |
| 5149 | 35517 | Α | 5190 | 1 | 2445 | |
| 5150 | 35518 | Α | 5191 | ļi | 708 | FSEGRNRFLNVGPTRFSTSRQTL |
| | | l | | | | MWIPDSFFSSLLSGRISTLRDET |
| | | | | | | GAIFIDRDPAAFAPILNFLRTKE |
| | | l | | | | LDLRGVSINVLRHEAEFYGITPL |
| | | 1 | | | | EKIKMEYCFSVCMYS*QVCFE |
| | | l | | | | MFLVRRLLLCEELERSSCGSVL |
| | | l | | | | FHGYLPPPGIPSRKINNTVRSAD |
| | | | | | | SRNGLNSTEGEARGNGTQPVLS |
| | | l | | | | GTGEETVRLANTIDSKYVAND |
| | | l | | | | DWLIFQYVDEEDLMNAIKDFSS |
| | 2.551.0 | ļ | 4100 | | 220 | VTKERTTFTDTHL |
| 5151 | 35519 | A | 5192 | 31 | 330 | YGGTATVQRWAESRHVPFPPS |
| | | | l | l | | QEQNANKICSVCQEEKDSADSY |
| | | | | 1 | | GEIPWWQGPERCWPVRLMLAT |
| | | 1 | | | | LGDYKWVLTGIGTDS*LGFTIPT |
| | | <u>L</u> . | L | | L | DHANAFSAKEIPQ |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|----------------|----------------|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | l | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 5152 | 35520 | A | 5193 | 1 | 734 | MISEVIVIOMLFLHAFSKVFSAL |
| | | | | | | IKNNKKPLODAQIKWKAISGLS |
| | | 1 | | | | GGMRRSECNRERDOVTRTOCR |
| | | l | | | | DISQK\RGPGD*GMATSKNGAM |
| | | l | | | | A*OLGPGCOGDASTGNAEFGES |
| | | l | | | | AHAWSGGGRVPGVTGPDREEV |
| | | l | | | | GRSWQGTSCGGGTSGCGRLQ* |
| | | 1 | | | | DGVASRGRW/DPARPREORAG |
| | | | | | | VROLAAPLGGP*SRRPWEPPGG |
| | | 1 | | | | SSCGRYLFAISSWSGVTVAOEG |
| | | | | | | ORKRGSGK*RTERSGPGLGRRL |
| | | 1 | | | | PPLLLTV |
| 5153 | 35521 | A | 5194 | 3 | 449 | EGORSSSPATALSSSGPPSLKM |
| | | 1 | | | | ATSKNGAMA*OLGPGCOGDAS |
| | į | 1 | | | | TGNAEFGESAHAWSGGGRVPG |
| | | 1 | | | | VTGPDREEVGRSWOGTSCGGG |
| | | 1 | | | | TSGCGRLQ*DGVASRGRWDRR |
| | | 1 | | | | DRASSGRESGSWLHHSGARSLG |
| | | 1 | | | | APGSRPVEAPAAGSEAKTPG |
| 5154 | 35522 | Α | 5195 | 606 | 841 | CTVGFALPVFY*GFSH*CSSGIL |
| | 1 | 1 | | | | V*NSRFLLCLCQALVSG*CWPH |
| 1 | | 1 | | | | KMS*GGFPLLLLTGIVSEGMVP |
| 1 | | 1 | | | | ASLCISGRIQL |
| 5155 | 35523 | Α | 5196 | 620 | 930 | IPFISFSCLIALARTSNTMLNRSG |
| | | 1 | | | | ERGHPCLVPVFKGNASSFCPFS |
| | | 1 | | | | MILAVGLS*IALIILKYVPSIPNL |
| 1 | | 1 | | | | LRVFSMKGC*ILSKAFSASIEIIM |
| | | _ | | | | WFLSLALFI |
| 5156 | 35524 | С | 5197 | 1 | 819 | |
| 5157 | 35525 35526 | A | 5198 | 591 187 | 815 387 | FFKTICFMRVRVKRPPNRLCVS |
| 5158 | 35526 | I ^A | 3199 | 187 | 387 | NMAVYFTWVQAGLHCESYPEH |
| | | l | | | | L*WSCRLPRRLGGVRL*PLEGE |
| 5159 | 35527 | A | 5200 | 1 | 1197 | L+WSCRLPRRLGGVRL+PLEGE |
| 5160 | 35528 | A | 5200 | 119 | 375 | ILDISPLSDE*IAKIFSHSVGCLFT |
| 3100 | 33320 | <u> </u> ^ | 3201 | 117 | 373 | LMVVSLAVOKLFSLIISHLSILA |
| 1 | | l | | | | FVAIAFGVLDVK/CLVHAYVLN |
| 1 | | l | | | | GIA*VFF*GFYGFRSNI |
| 5161 | 35529 | В | 5202 | 1 | 1053 | out vii or or or or |
| 5162 | 35530 | Α | 5203 | 2 | 157 | |
| 5163 | 35531 | Α | 5204 | 12 | 176 | |
| 5164 | 35532 | A | 5205 | 2 | 223 | QTVLEDRSPRARWIF*G**GTIC |
| | | | | | | SIPIPSFWWFSSNLSHSFVCRSPP |
| 1 | l | | | l | | SSSPGGLPMCTCVSKFPWAVW |
| | | | | | | PFSRY |
| 5165 | 35533 | Α | 5206 | 61 | 308 | |

| SEO ID | SEO ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------------------|-----------------------------|--|
| | of peptide | hed | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 5166 | 35534 | A | 5207 | 487 | 898 | DFAEVAYOLGISSGVCRTTDFH |
| | | | | | | EPRMLLSDRSSGSFVTII\SVFLS |
| | | | | ł | | FSSLKCL*SPLVHDALHOAFHP |
| | | | | 1 | | GKSRLRFLGSMACCMSKFTCPF |
| | | 1 | | | 1 | TLSTVPSSTPFSFSCSLIKTRSAT |
| | | | | | | LLKLWSISLRFRLHSWSSAFRV |
| 5167 | 35535 | A | 5208 | 9 | 191 | IPOHIYPPKTKPGRI*ISE*TNNR |
| | | | | | | L*NCGNDO*LINQKESRTRWIH |
| | | l | | 1 | | SRILPKTNREPNHE |
| 5168 | 35536 | A | 5209 | 1 | 1989 | |
| | 35537 | В | 5210 | 1 | 1488 | |
| 5170 | 35538 | A | 5211 | 929 | 1209 | IPFISFSCPIALARTSNTMLNRIC |
| | | | | | | ERGHPCLVPVFKGNASSFCPFS |
| | | 1 | | | | MILAVGLS*IALIILRYVPSILNL |
| | | | | | | FRVFSMKGC*TLSKAFSVSIEII |
| 5171 | 35539 | A | 5212 | 242 | 642 | FSLKRSFTSLVSWIPRYFILFEAI |
| | | 1 | | | | VNGSSLMIWLSVCLLLMYRNA |
| | | | | | | CDFFPLILYPETLLKLLISSSSLY |
| 1 1 | | | | | | LW*NSAVNLSGPGLFLVGRLLII |
| | | 1 | | | | ASISEPAIGLFRDSPSSWFSLGR |
| | | | | | | VYVSRNLSISSRFSSLFV |
| | 35540 | Α | 5213 | 747 | 885 | |
| 5173 | 35541 | В | 5214 | 115 | 1267 | |
| 5174 | 35542 | Α | 5215 | 209 | 322 | |
| | 35543 | В | 5216 | 1 | 3321 | |
| 5176 | 35544 | Α | 5217 | 390 | 655 | CLFPVHYPRLHAMMHQMKNP |
| | | | | | ŀ | VLVLGIGGFILGILGVIGGPVSLF |
| | | l | | | | KGS*KLLGLIETGKISLDHPVPG |
| | | l | | | | GTPTKMALYEHFMNTKEFGIE |
| | 35545 | Α | 5218 | 3 | 221 | |
| 5178 | 35546 | Α | 5219 | 798 | 914 | FVFLWDRW*YPLYHFLLCLFDS |
| | | | | | | SLFFSLLVLLAVYQFC |
| 5179 | 35547 | Α | 5220 | 12 | 460 | YLCMLHEVLVLCFSVPSGHFSF |
| | | | | | | SLN*LF*LAVPVTFYQG\LSFLA |
| | | l | | | | QA*ASQVDFRQLCWQQEFQAS |
| | | | | | | GS*LAGLHGSGIH*ARPLGSWL |
| | | | | | | QLPFQESEWFCLSGVPGATVVS |
| 1 | | | i | | | CTF**SPF*LV*DGISLWF*FAFL |
| | | | | | | *WPVMMSIFFMCLLAA |
| 5180 | 35548 | Α | 5221 | 3 | 508 | AERNGSRQGVGAGAGDHEVLQ |
| | | l | | l | | LLPDKWKQKILCPVQLLRGAW |
| | | 1 | | 1 | | SNYYSPDANRQP*VQGNAHLF |
| | | | l | | | AECWPHGEDSQPTVPTSQGRM |
| | | | İ | ŀ | | LAGPARHLPHPHVPSPSGSLRG |
| | | | l | 1 | | SDSEDTH*GTVAGSGCLHCLAP |
| 1 1 | | | I | ŀ | 1 | GHLHPGWPPSRVLPIPDRSVHQ |
| | | | | | | GPGRKAPPTPPRVTPLFT |

| SEQ ID | SEO ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|----------------|-----|--------------|-------------------|-----------------------------|---|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | ŀ | 09/540,217 | codon for peptide | of peptide sequence | deletion, \sipossible nucleotide insertion) |
| | | | l | sequence | | |
| 5181 | 35549 | A | 5222 | 584 | 1052 | LRKAAASGSFVFVAPDPNTDTC |
| 15101 | 33347 | ľ | 3222 | 304 | 1032 | SSQCSESESGSRGCSMGHQRSL. |
| | | | | | l | ОННАННИНННОННИННИН |
| | i i | | | | | HLDTGWRGE*SRHSAGLCPPSO |
| | | | l | | | RRLHSCQTSPSCSPPSGHRCI*L1 |
| | | | İ | | 1 | GIEAA*CHSL*PYOKDACHHFE |
| | | | | | 1 | EHSPPP*RPPHLPRHHLHPOPSS |
| 5182 | 35550 | A | 5223 | 1614 | 2308 | LRKAAASGSFVFVAPDPNTDTG |
| 3102 | 33330 | ľ | JELJ | 1014 | 2500 | SSOCSESESGSRGCSMGHORSL |
| | | 1 | ŀ | | | ОННАННИННОНИННИНН |
| | | 1 | | | | HLDTGWRGE*SRHSAGLCPPSQ |
| | | i | | | | RRLHSCQTSPSCSPPSGHRCI*LT |
| | | 1 | | | | GIEAA*/WS*PLTLSKRCVSPLR |
| | | 1 | ŀ | | | RAQSSSVTSSTSAQASSAPPEKK |
| | | | | | l | *L*PERPYSSPHPASVADLOMC |
| | 1 | 1 | | | | LPLNRITGOTNRPLHRAILLRW |
| | | | | | | MRSCNLLTCTVLSNVSFSFSELS |
| | 1 | | | | | YSRNTMCRG |
| 5183 | 35551 | A | 5224 | 3 | 407 | SVGLILPSSLQHHYHHHHHHHH |
| 1 | | | | | | OHHHHHHHHLHORKLAPPLC* |
| 1 | | 1 | | | | ADLPTCAPHQGIRPFGGFPQTS |
| ł | | ŀ | | | | GSPGLPVYAEEQGTERLSLQGT |
| | | ļ. | | | | GCGCQAGLLCWGPPVASTSVG |
| | | | | | | FSLESSVSPEQVPLSPGPAGTDA |
| 5184 | 35552 | Α | 5225 | 1 | 1287 | |
| 5185 | 35553 | Α | 5226 | 3 | 1315 | STMALLHSGRVLPGIAAAFHPG |
| 1 | | ŀ | | | | LAAAASARASSWWTHVEMGPF |
| | | 1 | | | | DPILGVTEAFKRDTNSKKMNLG |
| | | | | | | VGAYRDDNGKPYVLPSVRKAE |
| | | | | | | AQIAAKNLDKEYLPIGGLAEFC |
| 1 | | 1 | | | | KASAELALGENSEVLKSGRFVT |
| 1 | | 1 | | | | VQTISGTGALRIGASFLQRFFKF |
| | | ı | | | | SRDVFLPKPTWGNHTPIFRDAG |
| | | | | | | MQLQGYRYYDPKTCGFDFTGA |
| | | | | | | VEDISKIPEQSVLLLHACAHNPT |
| 1 | | 1 | ŀ | | | GVDPRPEQWKEIATVVKKRNL |
| 1 | | 1 | | | | FAFFDMAYQGFASGDGDKDA |
| | | 1 | | | | WAVRHFIEQGINVCLCQSYAK |
| | | ı | | | | NMGLYGERVGAFTMVCKDAD |
| 1 | 1 | 1 | 1 | | | EAKRVESQLKILIRPMYSNPPLN |
| 1 | 1 | 1 | 1 | 1 | | GARIAAAILNTPDLRKQWLQEV |
| 1 | 1 | | 1 | | | KGMADRI\IGHAGLQLVSNLQG |
| | 1 | 1 | 1 | | | REG\STH\NWATHSPTKLGMFC |
| | 1 | | 1 | | | FHRG*KLEQVERLIKEFSIYMTK |
| 5106 | 25551 | L | 6007 | 67 | 206 | DGRISVAGVTSSNVGYLAHAIH |
| 5186 | 35554 35555 | B | 5227 5228 | 1485 | 386 1883 | |
| 5188 | 35556 | В | 5229 | 117 | 641 | |
| 5189 | 35557 | c | 5230 | 1 | 552 | |
| 5190 | 35558 | В | 5231 | 250 | 378 | |
| E 170 | 1-2220 | 12 | - 50 . | 1=: 1 | 1 | |

| SEO ID | SEO ID NO- | Met | SEO ID NO: | Nucleatide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 5191 | 35559 | A | 5232 | 3 | 1117 | TPDPGQGCSEGGIVHETRPSPQF |
| 19191 | 33339 | A | 3232 | 3 | 11117 | LCQGSCAVGCSPLGLLR*RMM |
| | | 1 | | | 1 | ALGKIPPGHRGPAFLPAVESAH |
| | | 1 | | | | VVPGLPGLTRETLPAPLGPHRP |
| | Ì | | | | 1 | |
| | į. | | | | | QPPQGPLSTAPPAPLVSPLGPHV PGLPGPPPGCPSPLPLRPCPPPS |
| | | | | | | WLRPHRPVOPWWGT*GSGWRF |
| | 1 | | | ł | | RCRPGAAGRNPGLPRACCRGL |
| | | | | | | CRGPH*RPGGPRPGHSGPRTSS |
| | | 1 | | | | WGRTMGNRPRPSASAG**PRHR |
| 1 | | | | | | R*TSAERPGSPPQQSASRTGGRS |
| | | | | | Ì | PLSHPGSWWGVMGPPGLWAG |
| | | | | | Į. | APSMWG*GPGSRVAGGSGRRP |
| | | 1 | | | | TSPRPPHYPPHPPGTWPSGAOS |
| | | | | | | GRR*QAQTPGAATEG*GGWGL |
| | 1 | | | | | PPKPWCPQDQFLGVQDWVLPP |
| | | 1 | | | | NGARVGGTWAWKRESVLVPG |
| 5192 | 35560 | c | 5233 | 229 | 522 | NGARVOGT WAWKRESVL VFO |
| 5192 | 35561 | Ā | 5234 | 1 | 972 | MTAEYYKLKQVVTPIAAAVPD |
| 3193 | 33301 | ΙΛ. | 3234 | l' | 972 | VVSLLEQINISLCTWYAVIDLG |
| 1 | 1 | 1 | | | | NACFYIPVHKAHQKQFAISRHG |
| | 1 | | | | | OOYTFTVLLO/RRDLDLFSLPO |
| | | 1 | | | | DITLIVHYVDGIMLIGSSEOEVA |
| | 1 | 1 | | | | STLDLLVRHLHARGWEINLTKI |
| | | 1 | | | | QGLATSVKFLGVQWYGACRDI |
| | | ı | | | | PSKVKDKLLHLAPPTTKKEAOH |
| | | ı | | | | LAASFEWGPEOKGLOOVOVAV |
| | | | | | l | QAALPLGLYDPADPMVLEVSV |
| | | | | | 1 | ADRDAVWSLWQAPIGESQWRP |
| 1 | | | | | | LGFONKALPSADNYSPFEROLL |
| 1 | | | | | | ACYWALVETEATPVITORAHE |
| | | | ŀ | | | OSGHGGRDGGYAWAQOHGLP |
| | | | | | | LNKADLAVATAKCPISQQQRPI |
| 5194 | 35562 | A | 5235 | 3 | 246 | Si an as Si a a a a a a a a a a a a a a a a a a |
| 5195 | 35563 | A | 5236 | 3 | 841 | |
| 5196 | 35564 | A | 5237 | 1 | 746 | RDLDLFSLPQDITL\VHYVDGIM |
| 1 | | | | | | LIGSSEQEVASTLDLLVRHLHA |
| | | | | | | RGWEINLTKIQGLATSVKFLGV |
| | 1 | | | | | OWYGACRDIPSKVKDKLLHLA |
| | | | | | | PPTTKKEAQHLAASFEWGPEQ |
| | | | | | | KGLOOVOVAVOAALPLGLYDP |
| | } | | | 1 | 1 | ADPMVLEVSVADRDAVWSLW |
| | 1 | 1 | l | 1 | | QAPIGESQWRPLGFQNKALPSA |
| | 1 | 1 | | I | | DNYSPFERQLLACYWALVETE |
| | } | | l | 1 | | ATPVITQRAHEQSGHGGRDGG |
| | İ | 1 | | | | YAWAQQHGLPLNKADLAVAT |
| | | | Ì | 1 | I | AKCPISQQQRPILSS |
| 5197 | 35565 | A | 5238 | i | 483 | |
| 5198 | 35566 | À | 5239 | i | 1908 | |
| 5199 | 35567 | В | 5240 | i | 2718 | |
| | 1 | 17 | <u> </u> | | | L |

| SEQ ID NO: | SEQ ID NO: of peptide sequence | | SEQ ID NO: in USSN 09/540,217 | Nucleotide location of first codon for peptide sequence | | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide detetion, \=possible nucleotide insertion) |
|---------------|--------------------------------------|---|-------------------------------------|--|------|---|
| 5200 | 35568 | A | 5241 | 522 | 693 | LDFFLVFLQQFLPRPSSSEI*MLP GFPAAAYGPVAAAAVAAARGS GRKVYGTGDSQA |
| 5201 | 35569 | А | 5242 | | 225 | MGRNQSRKAENSKHESTYSPP KDHSSQAMEQSWTENGFEKL GFRRKEALYYLDLTASCQSQEL FQKWVSLCCPD*S*TYSPPKDH SSSQAMEQSWTENGFEKLGFR RKEALYYLDLTASCQSQELFQK WVSLCCPD |
| 5202 | 35570 | A | 5243 | | 1129 | PWISAPVPVDVEGAMDSVTV LSFGGLMLYFCAGWPPARRWC FPESISCGSMERDQWWGLQVA KRAGLAGGQSGRTVLRERVRIE LASTHIALAARISDWRCCRNGR YPARGPAALQNFQRYTGIQHV HRIGMAERMWCDNRERHTVS SGGGNRLPNFGPPDRSCDNLKTC HTSHGSVMAETAVINHKKRN SPRIVQSNDLTEAAYSLSROQK RMLYLFVDQIRKSDGTLQEHD GICEIHVAKYAEIFGLTSAEASK DIRQALKSFAGEVVFYRPEED AGDEKGYESPFWFIKRAHSPSR GLYSVHINPYLIPFFIGLQNRFT QFRLSETKEITDPYAMRLYKSL CQYRAFVNGGGEEKARGKPIL CRYGVGM |

| SEO ID | ISEQ ID NO: | Met | SEO ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|-------------|-----|------------|-------------------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 5203 | 35571 | A | 5244 | 1 | 1753 | MVDSLIARVGVMARGNAITLP |
| | | | | | | VCGRDVKFTLEVLRGDSVEKTS |
| | | l | | | | RVWSGNERDQELLTEDALDDLI |
| | | | | | | PSFLLTGQQTPAFGRRVSGVIEI |
| | | | | | | ADGSRRRKAAALTESDYRVLV |
| | | l | | | | GELHDEQMAALYRLGNDYRPT |
| | | | | | ŀ | SAYERGQRYASRLQNEFAGNIS |
| | 1 | | | | | ALADAENISHLHIHAEDTFLPFY |
| | | l | | | | LGKKDDVTYAIKPTCWPGLDII |
| | | | | ŀ | | PSCLALHGIEIELMGKFDEGKLP |
| | | | | | | TDPHLMLGLAIETVAHDYDVIV |
| | 1 | | | | | IDSAPNLGIGTINVVCAADVLIV |
| | | | | | ŀ | PTPAELFDYTSALQFFDMLRDL |
| | | | | | | LKNVDIKGFEPDVRILLTKYSNS |
| | | 1 | | | | NGSQSPWMEEQIRDAWGSMVL |
| | 1 | | | | ľ | KNVVRETDEVGKAVINHKKGK |
| | | l | | | 1 | NSPRMVQSNDLTKAAYSLSRD |
| | 1 | 1 | | | ŀ | QKRMLYLFVDQIRKSDGTLQE |
| | | l | | | | HDGICEIHVAKYAEIFGLTSAEA |
| | | l | | | | SKDIRQALKSLAGKEVVFYRPE |
| | | | | | | EDAGDEKGYESFPWFIKQSEE/P |
| | | İ | | | | QSGNFYTDTLGMAEFRRGGLR |
| | | | | | | ATAGPRLSRTRDCQGTEKVHG |
| | | | | | | KTVFDKTVP/WVPKRLKSPSCK |
| | | | } | 1 | | NRWP*KMQKLSVCTASSPGQQ |
| | | | | | l | LSTVRVTQREICFPVVRREVLLL |
| | l | | | | | IGTLTQTRKGQISVRA |
| 5204 | 35572 | Α | 5245 | 337 | 1977 | |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | l | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 5205 | 35573 | A | 5246 | 145 | 1929 | VSGVIEIADGSRRRKAAALTES |
| | | | | | | DYRVLVGELDDEOMAALSRLG |
| | | | | İ | | NDYRPTSAYERGORYASRLON |
| | | | | l | | EFAGNISALADAECDNLKTCHT |
| | | | | İ | | SHGSVMAETAVINHKKRKNSP |
| | | l | | | | RIVQSNDLTEAAYSLSRDQKRM |
| | | | | | | LYLFVDQIRKSDGTLQEHDGIC |
| | | | | | | EIHVAKYAEIFGLTSAEASKDIR |
| | | | | l | | QALKSFAGKEVVFYRPEEDAG |
| | | | | | | DEKGYESFPWFIK/RPSRGLYSV |
| | | | | | | HINPYLIPFFIG\LQNRFTQFRLS |
| ĺ | | ŀ | | | | ETKEITNPYAMRLYESLCQYRK |
| İ | | l | | | | PDGSGIVSLKIDWHERYQLPQS |
| | | | | ĺ | | YQRMPDFRRRFLQGFCRFRNH |
| | | l | | | | HQTGFSPAGANQRGPLAATLSG |
| 1 | | l | | | | PGGEGQSAVARLTGEKKNHPG |
| | | 1 | | | | AQYANRLSPRVGRFINAAGTTG |
| | | 1 | | | | FPTWKAGSERNAINDDVTYAIK |
| 1 | 1 | | | | | PŤCWPGLDIIPSCLALHRIETEL |
| | | l | | | | MGKFDEGKLPTDPHLMLRLAIE |
| | • | l | | | | TVAHDYDVIVIDSAPNLGIGTIN |
| | | | | | | VVCAADVLIVPTPAELFDYTSA |
| 1 | | | | | | LQFFDMLRDLLKNVDLKGNSN |
| | | | | | | GSQSPWMEEQIRDAWGSMVLK |
| 1 | | | | | | NVVRETDEVGKGQIRMRTVFE |
| | | | | | | QAIDQRSSTGAWRNALSIWEPE |
| | | | | | | CNEISIGVSLDQDGGSNSVLRK |
| 5206 | 35574 | Α | 5247 | 1 | 1383 | |
| 5207 | 35575 | Α | 5248 | 1 | 1731 | |
| 5208 | 35576 | В | 5249 | 1 | 1290 | |
| 5209 | 35577 | В | 5250 | 1 | 3345 | |
| 5210 | 35578 | Α | 5251 | 1 | 1959 | |
| 5211 | 35579 | Α | 5252 | 3 | 2356 | |
| 5212 | 35580 | В | 5253 | 334 | 1710 | |

619

| SEQ ID NO: | SEQ ID NO: of peptide sequence | Met hod | SEQ ID NO: in USSN 09/540,217 | Nucleotide location of first codon for peptide sequence | codon for last amino acid of peptide sequence | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
|---------------|--------------------------------------|------------|-------------------------------------|--|--|--|
| 5213 | 35581 | A | 5254 | 1 | 1302 | MKLMETLNQCINAGHEMTKAI AIAQPNDDSFEARKITRRWRIG EAADL VGVSSQAIRDAEKAGR LPHPDMEIRGRVEQRVGYTIEQI NHMRDVFGTRLRRAEDVFPPV WYSKSDTLKINGVEDHKTIED GDGKTYQNVQQFIDEGNYTSG DNHTLRDPHYVEDKGHKYLVF EANTGTENGVGGESLFNKAY YGGGTNFFRKESQKLQGSAKK RVAKFLITSNTCDNLKTCHTSH GSVMAETAVINHKKRNSPRIV QSNDLTEAAYSLSRDQKRMLY LFVDQIRKSDGTLQFHDGICEH VAKYAKFLGTSAFASCHTLAGE VAKYAKFLGTSAFASCHTLAGE LKSFAGKEVVFYRPEREDAGDE LKSFAGKEVVFYRPEREDAGDE |
| 5014 | 25500 | | 5255 | | 1460 | KGYESFPWFIKRAHSPSRRLYS VHINPYLIPLLYRVPNRVTQFRL SETK/EITHPYAMPLYESLCQYS |
| 5214 | 35582 | В | 5255 5256 | 1 | 1452 1323 | |
| 5215 5216 | 35583 35584 | A | 5257 | 1 | 1557 | |
| 5216 | 35585 | A | 5258 | 1 | 2259 | |
| 5217 | 35586 | A | 5259 | 1 | 2418 | |
| 5219 | 35587 | A | 5260 | | 1218 | MKLMETLNQCINAGHEMTKAI AIAQFNDDSPEARLTRRWRIG EAADLVGYSSQAIRDAEKAGR LPHPDMEIRGRVEQRVGYTIEQI NHMRDVFGTRLRRAEDVFPPYI GVAAHKERNQNISRYISNRLAR RECHDSPEEGTGNTRSVERLOR ELPSRGLTESQEHLLDTRKOFW FEDFKDGLGPILKCDNLKTCHT SHGSVMAETAVISLRSDQKRM LYLFVDQIRKSDGTLQEHDGIC EHVAKYAEIFGLTSAEASKDIR QALKSFAGKEVVFYRFEEDAG DEKGYESFPWEIKRAHSPSRGL SYSHINPYLIPPFIGLQNRFTOFR LSETKEITNPYAMRLYESLSAS NYQRMPDERRRFLQVVCVMEIN KQTSMLESUF |
| 5220 | 35588 | Α | 5261 | 1 | 2028 | |
| 5221 | 35589 | В | 5262 | I | 1653 | |
| 5222 | 35590 | A | 5263 | 1 | 1446 | |
| 5223 | 35591 | Α | 5264 | 1 | 1788 | |
| 5224 | 35592 | Α | 5265 | 22 | 1893 | |

| SEQ ID | SEQ tD NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|------|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | 1 | | sequence | | |
| 5225 | 35593 | A | 5266 | 1 | 2144 | MEKKITGYTTVDISQWHRKEHE |
| | | | | | | EAFQSVAQCTYNQTVQLDITAF |
| | | 1 | | | | LKTVKKNKHKFYPAFIHILARL |
| | | | | | | MNAHPEFRMAMKDGFIENMFF |
| | | | | l | | VSANPWVSFTSFDLNVANMDN |
| | | | | | | FFAPVFTMGKYYTQGDKVLMP |
| | ŀ | | | | i | LAIQFFDMLRDLLKNVDLKGFE |
| | | ŀ | 1 | | | PDVRILLTKYSNSNGSQSPWME |
| | | | | | | EQIRDAWGSMVLKNVVRETDE |
| | | | | Ì | | VGKDTGVRSKISGVIKMPMGV |
| | | | | | | AVVNCCTYGSDYRVWLASWM |
| | | | | | | MSQWLHYPEWYRKENKHKFY |
| | | 1 | | | 1 | PAFIHILARLMNAHPEFRMAMK |
| | 1 | | | | | DGELVIWDSVHPCYTVFHEQTE |
| | | ļ | | l | 1 | TFSSLWSEYHDDFRQFLHIYSQ |
| | | 1 | | | | DVACYGENLAYFPKGFIENMFF |
| | | 1 | | | | VSANPWVSFTSFDLNVANMDN |
| | İ | 1 | | | Į. | FFAPVFTMGKYYTQGDKVLMP |
| | | | ĺ | | | LAIQFFDMLRDLLKNVDLKGFE |
| | | 1 | | i | | PDVRILLTKYSNSNGSQSPWME |
| | | | | ŀ | | EQIRDAWGSMVLKNVVRETDE |
| | 1 | | | l | | VGKGQIRMGTELEFFRLSETKE |
| | | 1 | | ŀ | | TNPYAMRLYESLCQYRKPDGS |
| | | | | | | GIVSLKIDWIIERYQLPQSYQRM |
| | | | | į . | | PDFRRRFLQCDNLKTCHTSHGS |
| | | 1 | | l . | | VMAETAVINHMKRKNSPRIVQ |
| | | ı | | | | SNDLTEAAYSLSRDQKRMLYL |
| | | 1 | | | | FVDQIRKSDGTLQEHDGICEIHV |
| | | 1 | | | į. | AKYAEIFGLTSAEASMDIQHAL |
| | | 1 | | | | KSFSGKEVVFYRPEEDAGDEK/ |
| | | 1 | | İ | | GYESFPWFIKRAHSPSRGLYSV |
| | | 1 | | | | HINPYLIPFFIGLQNRFTQFLLSE |
| 5226 | 35594 | A | 5267 | 1 | 1167 | MNMNIKKIVKQATVLTFTTALL |
| | | | | | | AGGATQAFAKENNQKAYKETY |
| | | 1 | | | | GVSHITRHDMLQIPKQQQNEKY |
| | | | | | | QVPQFDQSTIKNIESAKGLDVW |
| | | l | | | | DSWPLQNADGTVAEYNGYNV |
| | | | | | | VFALAGSPEDADDTSIYMFYQK |
| | | | | l | | CDNLKTCHTSHGSVMAETAVI |
| | | | | | | NHKKRKNSPRIVQSNDLTEAAY |
| | | | | İ | | SLSRDQKRMLYLFVDQIRKSDG |
| | | | | | | TLOEHDGICEIHVAKYAEIFGLT |
| | | | | | | SAEASKDIROALKSFAGKEVVF |
| | | | | | | YRPEEDAGDEKGYESFPWFIKR |
| | | 1 | | | | AHSPSRGFYSVHINPYLIPFFIGL |
| | | | | | 1 | ONRFTOFRLSETKEITNPYAMR |
| | | | | | l | LYESLCOYRK\PDGSGIVSLK/ID |
| | | | | 1 | 1 | WIIKRSQLPQSAFYQPFMGLRR |
| | | 1 | | 1 | 1 | ESFYFRWERRTLGPLKSFSVKR |
| | | | | 1 | 1 | GTEAGKFRLAALLVRL |
| 5227 | 35595 | A | 5268 | 1 | 1395 | |
| | 1.000 | 1::- | 1 | | | L |

| SEQ ID | | | SEQ ID NO: | | | Amino aeid sequence (X=Unknown, |
|--------|----------------|-----|------------|-------------------|---------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | 1 | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | 1 | | sequenee | | |
| 5228 | 35596 | ĪΑ | 5269 | li . | 1375 | MNMNIKKIVKOATVLTFTTALI |
| | | | | 1 | | AGGATOAFAKENNOKAYKETY |
| | | 1 | | | | GVSHITRHDMLQIPKQQQNEKY |
| | | 1 | l | | | OVPOFDOSTIKNIESAKGLDVW |
| ļ | | | l | | | DSWPLONADGTVAEYNGYHV |
| | | 1 | | | | VFALAGSPKDADDTSIYMFYO |
| | | 1 | | 1 | | KIRRKNGPVSATFTSDGKIRLFY |
| | | 1 | | | | TDYSGKHYGKOSLTTAOCDNL |
| | | 1 | l | | | KTCHTSHGSVMAETAVINHKK |
| | | 1 | 1 | | | RKNSPRIVOSNDLTEAAYSLSR |
| | | | | | | DOKRMLYLFVDOIRKSDGTLO |
| | | | İ | | | EHDGICEIHVAKYAEIFGLTSAE |
| | | 1 | | | | ASKDIROALKSFAGKEVVFYRP |
| | | | | | | |
| l | | | | | | EEDAGDEKGYESFPWFIKRAHS |
| | | | | | | PSRGLYSVHINPYLIPFFIGLQNR |
| | | 1 | | | | FTQFRLSETKEITNPYAMRLYES |
| | | 1 | ŀ | | | LCQYRKPDGSGIVSL/KIDW/IIE/ |
| | | | | | | RYQLPKVPSPEARKITRRWRI\V |
| l | | 1 | 1 | | | KQRI*LGFLLRLSEMPRKQGDY |
| | | ŀ | | | | RTRIWKFEDGLSNVLVIQLNKLI |
| 5220 | 25505 | _ | 5250 | | 1660 | ICVMCLVRDCDVLKTYFHR |
| 5229 | 35597 35598 | B | 5270 | 1458 | 1668 2675 | CDAN AMERICAN A CONTRACTOR |
| 5230 | 33398 | A | 132/1 | 1438 | 2073 | CDNLKTCHTSHGSVMAETAVI |
| 1 | | 1 | ŀ | | | NHKKRKNSPRIVQSNDLTEAAY |
| 1 | | | | | l | SLSRDQKRMLYLFVDQIRKSDG |
| 1 | | | | | l | TLQEHDGICEIHVAKYAEIFGLT |
| İ | | 1 | | | | SAEASKDIRQALKSFAGKEVVF |
| | | 1 | | | | YRPEEDAGDEKGYESFPWFIKR |
| 1 | | 1 | | | | AHSPSRGLYSVHINPYLIPFFIGL |
| | | 1 | | | | QNRFTQFRLSETKEITNPYAM/R |
| | | 1 | | | | IPLH*LFR*TLRQTKPDNSAGKC |
| 1 | | 1 | | | | VKI**HTQNQRSGRSQNDF*RR |
| 5231 | 35599 | В | 5272 | 1 | 1317 | GI |
| 5232 | 35600 | A | 5273 | I | 987 | |
| 5233 | 35601 | A | 5274 | li . | 571 | |
| 5234 | 35602 | A | 5275 | 1 | 4161 | |
| 5235 | 35603 | A | 5276 | 1 | 1228 | |
| 5236 | 35604 | A | 5277 | 387 | 3466 | |
| 5237 | 35605 | A | 5278 | 1 | 6721 | |
| 5238 | 35606 | A | 5279 | 1 | 1651 | |
| 5238 | 35606 | A | 5280 | 5082 | 5879 | |
| 5240 | 35608 | A | 5281 | 1 | 231 | NHLAVRRLTELSGGQRQRAFL |
| 240 | 22000 | [^ | 201 | l. | | AMVLAONTPVVLLDEPTTYLDI |
| 1 | | 1 | 1 | | | NHOVDLMRLMGELRTOGKTV |
| 1 | | 1 | 1 | | | VD*VRDLNQVSRYC |
| 5241 | 35609 | A | 5282 | 1 | 303 | CLRILCPYPYIPLTEKTLA*PAL |
| 3241 | 33009 | ^ | 3202 | l' | 303 | YTLELTADMAETCKOFLPEFSL |
| | | 1 | l | | | |
| 1 | | 1 | 1 | | | TFSFQRGWEKETEYAEVLERNF ERDROLTYTAHGPHKADLRIOE |
| | | 1 | | | | |
| | | | l | 1 | 1 | SGVPYNEILVTL |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \-possible nucleotide insertion) |
| 1 | | | | sequence | | · |
| 5242 | 35610 | A | 5283 | 1 | 273 | TNSSVGPGDRLL*QTAAPHRGK |
| | | | | | | LKVFFGACAGVGKTWAMLAE |
| | | | | | | AQRLRAQGLDIVVGVVETHGR |
| | | 1 | | | | KDTAAMLEGLAVLPLKRQAYR |
| | | 1 | | | | GRHISEF |
| 5243 | 35611 | A | 5284 | 66 | 1200 | HILPAGHPTLRHSLFPHQQGRSS |
| | | | ľ | | | VQSALGAASGNGLKLVGRFEW |
| | | | i | | 1 | GPSRRARSGYPDATGYDQ\PKPI |
| | | | | | i | SAAVKEFFGSSQLSQFMDQNNP |
| | | | | | | LSEITHKRRISALGPGGLTRERA |
| | | | | | | GFEVRDVHPTHYGRVCPIETPE |
| 1 | | | 1 | | | GPNIGLINSLSVYAQTNEYGFLE |
| | | | i | | | TPYRKVTDGVVTDEIHYLSAIE |
| | | | | 1 | | EGNYVIAQANSNLDEEGHFVE |
| 1 | | | | | 1 | DLVTCRSKGESSLFSRDQVDY |
| | | | | | | MDVSTQQVVSVGASLIPFLEHD |
| | | 1 | | | | DANRALMGANMQRQAVPTLR |
| | | ı | | | | ADKPLVGTGMERAVAVDSGVS |
| | 1 | i | | | i | GGVVQYVDASRIGIKVTKTRCI |
| | | 1 | | | | RVKQVSTSTTLPLFLMESNPLF |
| | 1 | | | | | WMAVLVSAGILGOWPIGRLAD |
| 1 | | 1 | | | | KFGRLLVLRVQVFVVILGSIAM |
| 5244 | 35612 | В | 5285 | 1 | 862 | |
| 5245 | 35613 | A | 5286 | 1 | 579 | DPRD*RLKVAK*MVTLFGPOFV |
| | | | | | | RELOGRGFDIFLDLKFHDIPNTA |
| | | | | | | AHAVAAAADLGVWMVNVHAS |
| | | | | | l | GGARMMTAAREALVPFRPDAP |
| | | 1 | | | | LLIAVPV*RSIKASDLVDLGMTL |
| 1 | | 1 | | | | SPADYAERLAALTOKCGLDGV |
| | | | | | | VCSAQEAVRFKQVFGQEFKLV |
| | | | | | | TPGIRPOGSEAGDORRIMTPEQ |
| | | 1 | | | | ALSAGVEYMENGRPGTOSVK |
| 5246 | 35614 | A | 5287 | 484 | 978 | GIVRIPHRLADIKCWRAVLYNY |
| | | ı | | 1 | | THYSYQANLCCANLE*ADLSGS |
| į. | | | | | | VLDCANLQGVKMLCSNAEGAS |
| l | | 1 | | 1 | | LKLCNFEDPSGLKANLEGANLK |
| l . | | 1 | | | | GVDMEGSOMTGINLRVATLKN |
| l | | 1 | | | | AKLKNCNLRGATLAGTDLENC |
| l | | 1 | | | | DLSGCDLQEANLRGSNVKGAIF |
| | | 1 | | | | EEMLTPLHMSQSVR |
| 5247 | 35615 | A | 5288 | 3 | 504 | YRLSOSSSKSLVSRSWLNMRFIS |
| | 1 | Γ` | 1 | | [| SVMFMEPTSSSENRFTSPSCSE |
| 1 | | 1 | | | I | MSSSEATLRSFFLGTTSPCRSM |
| | | 1 | | | | VGLQLVKSSQSSSVSSFSSHVRL |
| 1 | | 1 | | | | SQSSSKSKVSRLAGT*EGSEKRS |
| 1 | | 1 | | | 1 | FREEKVPCLRLGLPESTLYAHC |
| | | | | | 1 | SV*SRTHVFSGTSHHSSKVAVG |
| ŀ | | 1 | | | 1 | MSIVQMRKL |
| | 1 | | | | | MISTA ÓMICKE |

| SEQ ID NO: | SEQ ID NO: of peptide sequence | | SEQ ID NO: in USSN 09/540,217 | Nucleotide location of first codon for peptide sequence | | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
|---------------|--------------------------------------|---|-------------------------------------|--|------|--|
| 5248 | 35616 | A | 5289 | 2 | 442 | HVIWHMPRKTSKCRQLLCSGA SRNADTAARQSTCSSHRPPGKIE SLGPRRVPGCSSVPSSRGEQSTG SPAAPRCGDVTHTEASQEEQP* LRGTHGPASTPEQGTAKAKVR DRRAVVHPGKTGIPSAAG*KGR |
| 5249 | 35617 | A | 5290 | 151 | 1185 | GRPGEPPGAAVQVE YVDQYTHIESPLPSVSYSFAFG SLISAVDPVATIAIFBALHVEED TEKGHVRLTPASPSTFFFFFSTE EKYAPGSCCRKAAVL*LLHISH QLSLDSPSLTVVIYVLKHIDLRK PSCRHGEIFVODHTAULSVLFS PSLGIMAILFSGIVMSHYTPREA SPYSCCLFTVSSHTVCCHPGLRG AIPYALSLHLDLEPMEKRQLIGT TTIVVLFTILLLGGSTMPLIRLM GLPGGAPRWCQLVAVGPPIP AQGNTVESEHLSELTEEEYEAH YURRQDQLSLFN*N*SCLWPSPC LPPPPTPTHTKHPVASPPFHGPA PDALTAWLCLSTQDLHHGRIQ MKTLT |
| 5250 | 35618 | A | 5291 | 5 | 198 | VCGRQQSLEAGL*GAATPFAVF PRPWSAVRVKEYGYTRLHILN GTHIHIQQVSDDQAFAQCHPP |
| 5251 | 35619 | A | 5292 | 137 | 308 | HLERTGPNLPPGARLATRPTTR LPAASPRGRDT\PLPIPISFYSETE AKGEAPYIEPE |
| 5252 | 35620 | A | 5293 | 612 | 1078 | RPPEKKERGRVRGRRGGGK RRRRKRKKSKGSKGREDAAAA AAAAQSPRTRAPAPD*ERRPQP APSARAPPRPLLPAPRRSRPAQV PPDSASPWAAAAGLALPPPQCP GGGARPLRLLPQPPAPGGTAR WEPRRPRPAAAPGLLQSPGPLP RQS |
| 5253 | 35621 | A | 5294 | 515 | 817 | LALPHLPSNLLLKGWLKLKA*S RPSRTPSFG*LSQWKHALKRLK PVITCLLQHGFLKPINSPYNSLIL PVLKPDKPYKLVQDLRLINQIV LPIHPMVSQA |
| 5254 | 35622 | A | 5295 | 1 | 951 | |
| 5255 | 35623 | A | 5296 | 1 | 1077 | |
| 5256 | 35624 | В | 5297 | 87 | 1423 | |
| 5257 | 35625 | A | 5298 | 29 | 234 | |
| 5258 | 35626 | В | 5299 | 77 | 327 | |
| 5259 | 35627 | В | 5300 | I | 235 | |
| 5260 | 35628 | Α | 5301 | 2 | 2144 | |
| 5261 | 35629 | Α | 5302 | 1 | 855 | |
| 5262 | 35630 | Α | 5303 | 845 | 1057 | |

| SEQ ID NO: | of peptide sequence | | SEQ ID NO: in USSN 09/540,217 | Nucleotide location of first codon for peptide | codon for last amino acid of peptide sequence | Amino acid sequence (X=Unknown, *-Stop codon, /-possible nucleotide deletion, \-possible nucleotide insertion) |
|---------------|------------------------|---|-------------------------------------|--|--|---|
| | | | | sequence | | |
| 5263 | 35631 | A | 5304 | 1 | 933 | |
| 5264 | 35632 | Α | 5305 | 1 | 954 | |
| 5265 | 35633 | Α | 5306 | 1 | 1603 | MEAEKFHQMPSVSRRTRKASG |
| | | | | | ŀ | VIQSKSENLRTRGANSHALKRL |
| | | | | | | KPVITRLLQHGLLKPINSPYNSP. |
| | | | | | | LPVLKPDKPYKRFLAFYGWSPR |
| | | | | | | SLIVDSCSKLEQHSTLSRVILVIY |
| | | | | | | KGFCRFRNHHQTGFSPAGANQ |
| 1 | | | | | ľ | RGPLAATLSGPGGEGQSAVACL |
| l | | | | | ľ | TGEKKNHPGAQYANRLSPRVG |
| i | | | | | Ì | RFINAAGTTGFPTGKRAVSATQ |
| l | | | | | 1 | LMDFADFGTTITQDFRLLGQTS |
| 1 | | | | | 1 | VDRLLQLSQGQAVKGNQLLPV |
| 1 | | l | | | | SLVKRKTTLAPNTQTASPRALA |
| | | | | | | DSLMQLARQVSRLESGQSSQLS |
| | | | | | | SLRLTLPDRLRSPLDHHGRRAS |
| | | | i | | | GNSHSGSPKPPSCLPLISPHLNP |
| l | | | | | | QVWDISTPSLATDHMPITIPLKS |
| 1 | | | | 1 | | N/TLTPLNLKCQYPIPQHALKRL |
| 1 | | | | | | KPVITRVLQHGVLKPTNSPYNS |
| l | | | | | | PILPVLKPDKPYKLVQDLRLINH |
| 1 | | | | | | IVLLPIHPMVPNPYTLLSSIPPSTI |
| 1 | | ĺ | | | | HYSVLDLKHAFFTIPFHPSSQPL |
| 1 | | l | | | | LAFTW\TDPDIHQAQQIT\WAVL |
| ĺ | | | | | | P\QRFPRTGPHYFNQAQISSSSV |
| 5266 | 35634 | В | 5307 | 1 | 874 | TYLGIILIKTYVLSLPIVSD |
| 5267 | 35635 | A | 5308 | 144 | 539 | |
| 5268 | 35636 | A | 5309 | 1165 | 1639 | PHPAVASRRGRAGPGGLSAPER |
| 3208 | 33030 | ^ | 3309 | 1163 | 1039 | TPSSELSPLSKGDLRKTHRTFSP |
| ĺ | | | | | | O*GDLRKTHRTFSTR*GDLRKT |
| ĺ | | | | | | HRTFCTR*GDLRKTHRTFSTR* |
| ĺ | | l | | | | GDLRKTHRTFSTR*GDLRKTHR |
| ĺ | | | | | | TFSTR*GDLRKTHRTFSTR*GDL |
| ĺ | | | ĺ | | | RKTHRTFCTR*GDLQKTHRTFS |
| ĺ | | | | | | TR*GDLRKTHRTFSTR*GDLRK |
| ĺ | | | | | | THRTFSTR*GDLRKTHRTFCTR* |
| ĺ | | | | | | GDLRKTHRTFSTR*GDLRKTHR |
| ĺ | | l | | | | TFCTR*GDLRKTHRNFSTR*GD |
| ĺ | | | | | | LRKTHRTFSTR*GDLRKTHRTF |
| ĺ | | | | | | CTR*GDLQKTHRTFSTR |
| 5269 | 35637 | A | 5310 | 235 | 453 | SHWPWLCSSTSCSSORSIVSSG |
| 1 | | ľ | | | | MARGPFLRKRDLLFPPPPPGSH |
| ĺ | | ĺ | | 1 | | GLELLEIIFHQGISQVHHLLHLQ |
| ĺ | | | 1 | 1 | | VWL*NLNVPDSSLPAENEATGP |
| ĺ | | | | 1 | | GFVPPPLAPVRGPLFPV\D\ARGP |
| ĺ | | | l | 1 | 1 | FLRKRDLLFPPPPPG\AM\FGASR |
| (| 1 | ı | J | ı | ı | |
| ļ | i . | | 1 | l | | DYFPPGDFPGPPPAPFASMAFL |

| SEQ ID NO: | SEQ ID NO: of peptide sequence | Met hod | SEQ ID NO: in USSN 09/540,217 | Nucleotide location of first codon for peptide sequence | codon for last amino acid of peptide sequence | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
|---------------|--------------------------------------|------------|-------------------------------------|--|--|---|
| 5270 | 35638 | A | 5311 | 2 | 2333 | TGRGYCGDHESSFGAMEEPGA TTORYLGLLEELREVVAALPE GMRPDSNLYGFPWELVICAAV OGFFAALFFLWRSFRSVRSRLY VGREKKLALMLSGLIEEKSKLI EKFSLVOKEYEGYEVESSLKDA SFEKEATEAOSLEATCEKLNRS SFELEBELICLEKELKEEKSKHS EQDELMADISKRIQSLEDESKSL KSQVAEAKMTEQIFGMNFERL KIAIKDALNENSQLQESGKYOL QEAEVWKEQVSELNKOKVTFE DSKYHAEQVLNOKESHIKTLTE RLLMKDWAAMLGEDITDDD NLELEMNSESENGAYLDNPPK GALKKLIHAAKLMASLKTLEGE RNQYIQLSEVDKTKEELTFHIK NLQTQASLQSENTHFENENQ KLQQKLKVMTELYGENSKLTLTEE RNQYIQLSEVDKTKEELTFHIK NLQTQASLQSENTHFENENQ KLQQKLKVMTELYGENSKLL HRKLTVEENVRLEKEEKLSKV DKISHATCHENTSCHESTERTHENENGERICHTURENSCHESTERTHENENGERICHTURENSCHESTERTHENENGERICHTURENSCHESTERTHENENGERICHTURENSCHESTERTHENENGERICHTURENGERICHTURENGERICHTURENGERICHTURENGERSCHLTDPHRAPS DTOSLSPPWDODRRMMFPPPG QSYPDSALPPQRODRFCSNSGR MPSEMESSRNDTKDDLGNLDW SSSPPAKKATOPGYPPDLA |
| | | | | | | PVRGPLFPVDARGPFLRRGPPFP |

| SEQ ID | | | SEQ ID NO: | | | Amino acid sequence (X=Unknown, |
|--------|------------------------|----------|-----------------------|--|--|---|
| NO: | of peptide sequence | hod | in USSN 09/540,217 | location of first codon for peptide | codon for last amino acid of peptide sequence | *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
| | sequence | İ | u9/340,217 | sequence | or peptide sequence | deretion, i-possion nacicolide insertion) |
| | | | | | | |
| 5271 | 35639 | Α | 5312 | 141 | 2788 | GLRVPLSPSSPRSRLRSGPLRLF |
| | | | | | | GADSGSGPKAVCSPPFIVAPTG |
| | | | | | | RGYCGDHESSFGAMEEPGATP |
| | | | | | | QPYLGLLLEELRRVVAALPEG |
| | ł | | | l | | MRPDSNLYGFPWELVICAAVV |
| | ı | | | | | GFFAVLFFLWRSFRSVRSRLYV |
| | 1 | | | | | GREKKLALMLSGLIEEKSKLLE |
| | į | 1 | | | | KFSLVQKEYEGYEVESSLKDA: |
| | 1 | | | | | FEKEATEAQSLEATCEKLNRSN |
| | | | İ | | | SELEDEILCLEKELKEEKSKHSI |
| | | | | | | ODELMADISKRIOSLEDESKSL |
| | | | | | | KSOVAEAKMTFOIFPMNEERLI |
| | 1 | | | | | IAIKDALNENSOLOESOKOLLO |
| | 1 | 1 | | | | EAEVWKEQVSELNKQKVTFEI |
| | | ļ | | | | SKVHAEQVLNDKESHIKTLTER |
| | | | | | | LLKMKDWAAMLGEDITDDDN |
| | 1 | | l | | | LELEMNSESENGAYLDNPPKG |
| | 1 | 1 | | l | | ALKKLIHAAKLNASLKTLEGE |
| | | 1 | | | | NOIYIOLSEVDKTKEELTEHIKI |
| | | | | | | LQTEQASLQSENTHFENENQK |
| | | | | | | QOKLKVMTELYQENEMKLHR |
| | | | | l | | KLTVEENYRLEKEEKLSKVDE |
| | 1 | 1 | | | | ISHATEELETYRKRAKDLEEEL |
| | 1 | 1 | | | | ERTIHSYQGQIISHEKKAHDNW |
| | 1 | | | l | | LAARNAERNLNDLRKENAHNI |
| | | | | | 1 | OKLTETELKFELLEKDPYALDV |
| | | | | | 1 | PNTAFGREHSPYGPSPLGWPSS |
| | | 1 | | | | ETRAFLSPPTLLEGPLTLSPLLP |
| | | | | | l | GGGGRGSRGPGNPLDHQITNEI |
| | | | | | | GESSCDRLTDPHRALSDTGFLS |
| 1 | i i | | | | | PPWDODRRMMFPPPGOSYPDS |
| l | | | | | | ALPPORODRECSNSGRLSGPAE |
| | | <u> </u> | | | | , , |
| 5272 | 35640 | A | 5313 | 217 | 447 | FQRMSGL*GYSPPLGGQPAL*E |
| l | | | | | | CQGAADSAGG\RGLDSERSLGF |
| | | | | | | \PAASGPNTALGWQAQPWS*Q |
| | | _ | | | | AGPELPRAEFLQA |
| 5273 | 35641 | Α | 5314 | 3 | 287 | TLRNRHRELRTCLSGPGLGLPT |
| | | 1 | | 1 | | QVSVVAGGCCVCPSSSQSPVPF |
| | | | | | | PPALSAAPWHSHRAGCPPSGGI |
| 1 | | | | | | *PQRPLILWNQPLSNTLLEKEL/ |
| | | | | | | PPPAH |
| 5274 | 35642 | Α | 5315 | 3 | 468 | ALARSPAG*PQSPDGDLCFRHR |
| | 1 | 1 | | 1 | | KGERRPAAPAGQCPAGRQRHV |
| | | 1 | | 1 | [| PAAGRDGKPGRAPGADR*AGP |
| | | | | 1 | | LHLYHLPAPCGGGTPGDSNPRI |
| | | 1 | | 1 | | APAQRSE*CTPPPPQ*RNNRKPS |
| | | 1 | | 1 | | TRAGLLLPS*HVQLSGGLTLCP |
| | | | | 1 | | GDRVS*WPQGVLAAPGPGPCT |
| | | 1 | | | | HL |
| 5275 | 35643 | В | 5316 | 64 | 288 | |
| | 1200.0 | L~ | | 1 | | |

| SEQ ID NO: | SEQ ID NO: of peptide sequence | Met hod | SEQ ID NO: in USSN 09/540,217 | Nucleotide location of first codon for peptide sequence | Nucleotide location of last codon for last amino acid of peptide sequence | Amino acid sequence (X=Unknown, *-Stop codon, /-possible nucleotide deletion, \-possible nucleotide insertion) |
|---------------|--------------------------------------|----------------|-------------------------------------|--|---|---|
| 5276 | 35644 | Α | 5317 | 73 | 265 | NGRTSRCFSPGKH*EYCSGTFH |
| | | ŀ | | | | PLQVVGKIYSNLDKIL*ASRAR |
| 5277 | 25515 | | 5318 | 125 | 461 | WGLCSRKPGYWSCTQPPTSS |
| 5278 | 35645 | A | 5319 | 298 | 593 | LGVEVEPVTGGDAVIGASHDAF |
| 32/8 | 35646 | l ^A | 3319 | 298 | 393 | LQVNIESIVPEHSTRCKLLGKFI |
| | 1 | ŀ | | | | RIWIKYFRHLVHGGGSAPVSLV |
| | 1 | l | | l | | |
| | İ | | | | | TGPVHGDSLLGPVAPEPPRVVE |
| | 1 | | | | | PARQVRAHAVVVAGPLRRGRG |
| | i | | | | | LGRHRLRARSG*GMPQSVRGA |
| 1 | | l | | | | CGAQGHGPAGEDQRLLPRERG |
| | | l | | | | PAGQVQQPGVVPGLQDPEGCL |
| | | 1 | | | | RVQDQ*PGLREQSPHRARDA*S |
| | 1 | | | | | ILSKFE*IFPTTCSGWNVPEQYS |
| | | | | | | QCLPGEKHRDWPR*LHHLL*PA |
| | } | l | | | | QLPPPVTTSTGHPSAIEGLETPL |
| | | | | | | RSPLTPGPPGKSIIPHHPQSPDCD |
| | | _ | | | | GTDCAAFPENIIRLRSRKICKRG |
| 5279 | 35647 | Α | 5320 | 1124 | 1835 | HSLHFPKFPSFLFLTLITLGLLM |
| | | | | | | AVPPGLITTHQQRQAML*YKPL |
| | | | | | | ARLLEPLISFPSWKSILKEITSQC |
| | | l | | | | SICYSTTPQRLFRPPPFPTHQTR |
| | | 1 | | | | GFAPPR/HWQIDITHMPQVRKL |
| | | 1 | | | | KYLLVLVDTGSKKATVVISSLL |
| | | | | | | SDIIPRFGLPTSIQSDNGPAFISQI |
| | | 1 | į | | | TQAISLALGIQRTHGLLKTHLT |
| 1 | 1 | | | | | NLSHQLKKDWTILLPLSLLRIQ |
| | 1 | | | | | ACPRNATGLHSDG/VGPKLLPG |
| | 1 | | | | | SPFQLHHTWDSP |
| 5280 | 35648 | Α | 5321 | 1 | 1758 | |
| 5281 | 35649 | Α | 5322 | 1 | 1967 | |
| 5282 | 35650 | Α | 5323 | 76 | 1908 | |

| SEO ID | ISEO ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|-------------|------|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | coden for last amino acid | *=Stop codon, /=possible nucleotide |
| 1 | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 5283 | 35651 | Ā | 5324 | 524 | 2144 | QSDLSASQHGLFPLATEVRSSG |
| 3283 | 33631 | ^ | 3324 | 324 | 2144 | AASCPDSDSICPAPTIAPGRATP |
| | | | | | | |
| | İ | | | | | PQANCWASEGTLRYQALPGNR |
| | | | | | | APVSQVSQAGGANLCVQQPKK |
| | 1 | | | | | HLTNFKSGKRPLFTLFSNLQGP |
| | | | | | l | RSRPVAFLSKQLDLTVLGWPSC |
| | | | | | | LRAAAAAALIVLEALKITNYAQ |
| | | 1 | | | | LTLYSSHNFQNLFSSSHLTHILF |
| | ļ. | | | | | CSPGSFSCTHSLLSLPQLPIVPGP |
| | Į. | | | | | DFSPASHIILDTTPDPHDCISLIH |
| | i | | | | l | LTFTPFPHISFFPAPHPDHA*FIN |
| | | | | | | GSSTRPNRHTPAKAGYAIVQVT |
| | 1 | | | | | SPPLKTSHFLSIVEIYPOGNNFS |
| 1 | | | | | | VFHLLFYYSSGIIQAPLLSLHIKL |
| İ | ŀ | 1 | | | | RDLPPPRTGKSALLNMPRVRKL |
| | | | | | | KYLLVLVDTGSKKATVVISSLL |
| | | 1 | | | | SDIIPREGLPTSIQSDNGPAFISQI |
| | 1 | | | | į . | TOAISLALGIORTHGLLKTHLT |
| | 1 | | | | | NLSHOLKKDWTILLPLSLLRIQ |
| 1 | 1 | 1 | | | | |
| 1 | 1 | 1 | | | | ACPRNATGLHSDGEARSSFQAH |
| ł | | 1 | | | | HFNFITHGTVPDVFVPILQLLNE |
| | | 1 | | | l . | DFEDPCLGYLPSPEISICLEPTSW |
| | 1 | | | | | SKDRSCSSGEEGSAGQTVTGDL |
| | | _ | | | | HKAQTPELDQPASLNCPDL |
| 5284 | 35652 | A | 5325 | 1 | 420 | RTRGGEKE*EEKQRSRR*RIK*E |
| | 1 | 1 | | | | EEEK*RRSRGAGDKG*NERRRR |
| | | | | | | NRGEPVEKEEDDRRRKRQWRR |
| | 1 | 1 | | | i | GEEEKRRRGRNCGGGGGEEKE |
| | | 1 | | | | DGRRRRLPCFLLLPSLLVSLLW |
| | | | | | i | LVSFLPCVFGFFGAPAVVFARF |
| | | | | | | RGLRAFCRF |
| 5285 | 35653 | A | 5326 | 2 | 467 | |
| 5286 | 35654 | A | 5327 | 269 | 777 | |
| 5287 | 35655 | A | 5328 | 2443 | 2627 | VGFFFFFWWGERGTGSYSVTQ |
| | | | | | | ARVQ*YDLGSLQLLPPSFKGFS |
| | | _ | | | | CLSLPGSWYYRHGPPRLG |
| 5288 | 35656 | A | 5329 | 57 | 394 | |
| 5289 | 35657 | Α | 5330 | 33 | 311 | HNTLPKTKPWFQEPGDEEPQQE |
| 1 | | 1 | | | I | EPPTESRDPAPRLPRSP*SADPP |
| 1 | 1 | 1 | | | 1 | WRSQRPQGLTRPPPEPLRPHGS |
| 1 | | 1 | | | | PPAHLSLFCQRSCPGPQERPHPS |
| | 1 | | | | | тм |
| 5290 | 35658 | Α | 5331 | 226 | 406 | |
| 5291 | 35659 | В | 5332 | 51 | 90 | |
| 5292 | 35660 | Α | 5333 | I | 348 | PPSQRV*GWHEMRQGGRQHAQ |
| | 1 | 1 | 1 | 1 | 1 | PVLSQQGLTAGHCHHQHCRRP |
| | 1 | 1 | | 1 | | LACDVRPVVYEKVSRDHGLVS |
| 1 | 1 | 1 | | 1 | I | GQHN/PAPESQGQSTSPPRHTGR |
| 1 | 1 | 1 | 1 | 1 | 1 | KQARAGGEKKVTSDPANTAQH |
| | | 1 | | | 1 | NPNTGSRGRP |
| 5293 | 35661 | A | 5334 | 109 | 380 | |
| | 1 | 11.7 | | | <u> </u> | |

| SEQ ID NO: | of peptide sequence | hod | SEQ ID NO: in USSN 09/540,217 | location of first codon for peptide sequence | codon for last amino acid of peptide sequence | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
|---------------|------------------------|-----|-------------------------------------|--|--|--|
| 5294 | 35662 | A | 5335 | 448 | 724 | WPSRSALAAGGRTAPTPRSRAG PPAR*RAGRESARGTS*GIRPRS QPARRPCPPAPVGRGLPPGPAR PPPRAAPREPPRCRAAAHTSRP AGS |
| 5295 | 35663 | В | 5336 | 1 | 1554 | |
| 5296 | 35664 | В | 5337 | 99 | 366 | |
| 5297 | 35665 | A | 5338 | 1 | 714 | |
| 5298 | 35666 | С | 5339 | 391 | 689 | |
| 5299 | 35667 | A | 5340 | 2 | 614 | |
| 5300 | 35668 | A | 5341 | 2 | 461 | |
| 5301 | 35669 | В | 5342 | 45 | 1148 | |
| 5302 | 35670 | A | 5343 | 215 | 849 | IKRLPLMKRMWL*LQPESLEIA GILVQ*ME*QPKGCINSIPVSK PSPIVVOKPNGOWRQVODLRLI SDAVIPLYPAVSNPYTILSQILE EAEWFTVLDLKDAFFCIPLRSD SOFLLAFEDITDHTSQLTWTTY TQGFMDTPHEGGGLAQDLGH FSSPGTLVLQYVDDLLLAKQQA TLLNFLANGGVKLSKLKAQ LCELLVFSSCARMHS |
| 5303 | 35671 | A | 5344 | I | 1035 | MGQWWALVRSTLELFHTDDEE GEGYDEVTEEVTEGVVLPAKA KVAQEEEVHPYPSAPPHYYFEE KEWPDPPDLSFLEGTGREVVAP TYEQHLERLLSVLFRQEFSRLD ERDDAVEQLRGVCIRAWEKITS GEQYPSFSAVKQGPKELYADF IAWNLLRGESLKKVISDSAAQD IVLQLLAFGRVNLDCQAALRPI FTGGSAHLDVIKACDGIGAKQD SERFAFTIPVVNNLQPAKHFHY FTDGSSNGKASYSGSKGQNQQ PIWLSRHLKPYHEPDAKEEIPG GCPRTWLQPCRD*C*GGP*P VTSNTR*T*GPTWGQIKKLSPM VEENLRKAGQLVTMTVVWN |
| 5304 | 35672 | A | 5345 | 1566 | 1767 | KGGWSQRHSQGACYTCRKSGH WAKECPQPGIPPKPRPICVGPH* KSDCSTHLAANPRAPGTLAQGS L |
| 5305 | 35673 | В | 5346 | | 3429 | |
| 5306 | 35674 | Ā | 5347 | 1 | 1776 | |
| 5307 | 35675 | Ā | 5348 | i | 933 | |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=1)nknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 5308 | 35676 | _ | 5349 | I | 1743 | I MGKVWAVVRSTLELFHTDDEE |
| 5508 | 33070 | A | 3349 | 1 | 1743 | |
| | 1 | ŀ | | l | | EGEYNEVTEEITEQVYLPAKAK |
| | 1 | | | | | AVKEREQRGNITATFEPFPFKLI |
| | | | | I | | KEFKQAINQYGPGSHFVMGLL |
| | | | | I | | KNVAVSSQMIPTDWDALTQAC |
| | | | | l | | LTPAQFLQFKTWWAHEASIQA |
| | | | | l | | ACNAQAQPQINITTGQLLGVGG |
| | | | | i | | WAGLDAQVVMQDDAIEQLRG |
| | | l | | | | VCIRAWEKIPLCGEQYASFSAIK |
| | | | 1 | | | QGPKEPYVDFIAWLQESLKKVI |
| | | | | | | ADSAAQDIVLQLSAFDNANPDO |
| | | | | | | OAAL*PIRGNAHLVDYIKACDG |
| | | | | | | IRGNMHKATLLVQAMAGLRVI |
| | 1 | | | | | KGNPLLPGACFNCGKHGHTKO |
| | | | | | | ERRKKSVSQAARWGKRKTADE |
| | | | | | | EICPKCKKGKYWANQCHSKFD |
| | l | | | | | KDGTLISGNAMRAEQDCEWFT |
| | | | | | | FTIPAVNNLQPAKHFHRFTDVS |
| | | | | | 1 | SNGKASYSGSKGGQARVQLFE |
| | | | | | | |
| | | | | | | NASVRATNSDLPQSSLWCRRKT |
| | | | | | | SVSVAVLVSATIPISRVQGPSQV |
| | | | | | | LGQGEKQTNQNVVPNPYTLLS |
| | | | | | | QIPEEAKWFTALDLKDAFFCIPL |
| | ļ. | | | | | HSDSQFLFAFEDLTDHTSQLTW |
| | | | | | | TILPQGFRDSPHLFGQALAQDL |
| | | | | | 1 | GHFSSPGTLVLQYVDDLLLATS |
| | | | | | | SEASCQQATLDFLSFLAN |
| 5309 | 35677 | Α | 5350 | 1 | 1085 | |
| 5310 | 35678 | Α | 5351 | I | 3105 | |
| 5311 | 35679 | A | 5352 | 1 | 5172 | |
| 5312 | 35680 | Α | 5353 | 41 | 324 | |
| 5313 | 35681 | Α | 5354 | 18 | 270 | KLSQVCIDLL*IREGERDMYPG |
| | | | | 1 | | WAKFPSPYSLKGT*PIAQGVLW |
| | | | | 1 | | SFGDFFYC/IPSTLPTPKSWRLFE |
| | 1 | | - | | i . | SPFPESLTPVSLVWWPC |
| 5314 | 35682 | Α | 5355 | 80 | 384 | SNNRTEGAWGKCQLMSS/PLTE |
| | | 1 | | 1 | I | PQVTLTIDSQEIDFLLDTGAAFS |
| | 1 | 1 | | 1 | 1 | VLISCPEQLSSRSVTI*GILGQPV |
| ŀ | | | | | i | TRYFSHLLSCNWETLLFSHAFL |
| | | | | | | VMPESPTPLLGR |
| 5315 | 35683 | С | 5356 | 99 | 317 | |
| 5316 | 35684 | Α | 5357 | 388 | 476 | KVCPRPCRTSM/LPIRII*KLPQV |
| 1 | | 1 | | 1 | | CLDLL*HEGEGDMYPG*AKFPS |
| ı | i | l | 1 | 1 | I | PYCLKGT*PGTIAGSWARGVSA |
| l | | | | | | |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nuclcotide insertion) |
| 5317 | 35685 | A | 5358 | 254 | 849 | LQPESLEIAGILVQ*MIE*OPKK |
| 3317 | 33003 | , | 3330 | 1 | 0.5 | GTNSIPVSKPSP/GVOKPNGOW |
| | | | ŀ | | | ROVODLRLISDAVIPLYPAVSNP |
| | | | | | | YTLLSQILEEAEWFTVLDLKDA |
| | | | | l | | FFCIPLRSDSOFLLAFEDPTDHT |
| ĺ | | | | | | SQLTWTVFTQGFMDTPHLFGO |
| | | | | 1 | | SLAQDLGHFSSPGTLVLQYVDD |
| | | | | | | LLLAKQQATLDLLNFLANOGY |
| | | | | 1 | | KLSKLKAQLCELLVFSSCARMH |
| 5318 | 35686 | Α | 5359 | 1 | 909 | |
| 5319 | 35687 | A | 5360 | 153 | 436 | CFCCCVEGNKPRNLORTTKTPR |
| | | | | | 1 | LSVMSPSSCRGRGIWPNPGTC/R |
| l | | | | l | | PSPSLi*SRSRQTWRITTPCOOG |
| | | | | | | NKTGORMNLTN*QEQASEGG* |
| | | | | 1 | | *OTPLS |
| 5320 | 35688 | A | 5361 | 1 | 1632 | |
| 5321 | 35689 | С | 5362 | 1 | 675 | |
| 5322 | 35690 | Ā | 5363 | 604 | 1047 | SNNRTDNPTSVAYLSKETDVV |
| | | | | 1 | | AKGWPHCLWVVVAVAILVLEA |
| | | | | | | IKIIQGKDFTVWTSHDVNGILG |
| | | | | | | AKGNSWLSDKRLLRYQALLLE |
| | | | Î | l | | GPVLQIHTCVALNPAIFLPEDGE |
| | | | | | | PIKHDYQQIVAQTYVT*EDLLE |
| | | | | 1 | | VPLANPDLNLYTNGSSFV |
| 5323 | 35691 | Α | 5364 | 749 | 1002 | QLKKGTNSLLVSKPSPVWIPTG |
| | | ĺ | 1 | | | TLTQIMGTGVANIC*PVF*KD*G |
| | | | 1 | 1 | | ELGKMNYAMMSTITQGKEENP |
| | | | | 1 | | AFLKWLWEALRKYTPLSP |
| 5324 | 35692 | В | 5365 | 114 | 2309 | |
| 5325 | 35693 | Α | 5366 | 413 | 1157 | |
| 5326 | 35694 | Α | 5367 | 105 | 478 | YGHCCYDHRICCFFPATEQKVC |
| | | | | | | PCAAQG*PL*LRGDDPEMSVYI |
| | | | | | | *QLPLYYSSDLLSAANEVQILAF |
| | | | l | | | FQGDVSFFPVATTTDTLSVTFN |
| | | | İ | | | FPFNYQGVNDFDFDFKQFLHSS |
| | | | | - | | FDFCFGRVFSNFE |
| 5327 | 35695 | Α | 5368 | 531 | 1087 | RLQPPGAPVEDITRPVSAKPRD |
| | | | 1 | | | ADRNSTGCYLV*LQHQRQTES |
| | | | | | | GRQLSGL*GPGCNGVH/ASLYR |
| | | | | İ | | TSAMFAERFGSYSRRSTTAGIPS |
| 1 | 1 | | | Ī | | LLRLKSTIRRSDRSRRKAQRKR |
| l | | | 1 | | | CGQVMPQHRRSIRPLLQPITPSL |
| | | 1 | 1 | | | NRNLHRSPHRSRNRWSRLNRR |
| | | | | | | LKHHLRRSQNRSRSWKKKLHR |
| | | | L | | | RVKPMLCNWVR |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 6330 | 35696 | - | 5369 | 544 | 1381 | I |
| 5328 | 33696 | A | 3369 | 344 | 1381 | RVLTRVSNAIAAKPLCLAVCAV |
| | | | | | | |
| | | | | | | VEGGRIRALVAVAAWGAGVTG |
| | | | | | | GPAGLIACGPVSPSVIRGQFRHA |
| | | | İ | | | GISFFLYAIGGEMVPAVRRQNH |
| | | | | | | TPA*HKRFAKAFQLAHPNAVN |
| | | | l | | | AEHFAGGDRHLFSHLNQGCVV |
| | | _ | | | | KHHVRRDITFIGYRFTQFA |
| 5329 | 35697 | Α | 5370 | 81 | 863 | AYGNPVEIAGGARQAGVNFTG |
| ŀ | | | l | 9. | | VFRPRFSRRWRRISGETCKLWW |
| | | | | | ! | RRWRSAWASINQTFASWSTLIF |
| | | | | | | RAISNPIIRKPDAPGVMACPRKR |
| | | | l | | 1 | CCFTIRLIWRGCAVVWKRSR/E |
| | | | | | 1 | GQLQDIERHKLNAMGAFAEAQ |
| | | | | | i | TCRRLVLLNYF/GRRASGAVRE |
| 1 | | | | | | LRYLPRSAETVRRFNRCSDCPF |
| ļ | | | | | | HHWSCESAVWDGLCGGSDSCC |
| | | | | | | GVSRARLFASPVNLPITGEIPER |
| | | | | | | GFHPFCGRTTENGKNHPRNLFI |
| | | | | | | WRSNCSVLPVKVMSLCSSTPCP |
| 5330 | 35698 | В | 5371 | 12 | 273 | |
| 5331 | 35699 | A | 5373 | 145 | 336 | SEEEEEDEEEEEEEEEE |
| | | | | | | E*EEGESAIICAKVCISVFPRRK |
| | | l | | | | NELNMAITPNTIPKLNHW |
| 5332 | 35700 | A | 5374 | 294 | 657 | VAPGDRHAFHGGGSGLSPELTL |
| | | | l | | | PQTQCCAQATVQGLEGTRSWS |
| | | | | | | QSGTSSLSPWSHTSLACPQKEE |
| ļ | | | | | i | GEEEEEEEEEEEEE |
| | | | | | | EEEEEEEEEEEEAKTQ*KSG |
| | | | | | | QKI*TDSPQKK |
| 5333 | 35701 | A | 5375 | 2 | 588 | SRPGITGSTISYGDPGHGAGPPG |
| | | | | | | ADLGPARSLKPERAAGAQLAA |
| | | l | | | | GEARQSGDPGLPGGPGHSLGTA |
| | | | | | l | PC*VDKGWGHPVSTVHHQRQP |
| 1 | | l | | | | QPGGLRAPGTALLAGTQPSHPA |
| | | | | | | AGPWEPQPQRGVRVLGGRRDS |
| | | | | | | *VGGG*GQHNKALWGPR*PHT |
| | | | | | | EQKPDRKLSRIPLRAAGGEKRG |
| ĺ | | | | | | CGCDRAGCLVLGPPQLPAQGL |
| 5334 | 35702 | Α | 5376 | 1 | 445 | SLSHRAGGGGGVGGGAVCLFS |
| | | | | l | | PPRTKRESAPESPSRVLGHSPVP |
| | | | l | l | | S*GAPSTRGSVSRILTSGGTHER |
| 1 | | | l | | | SNGLTCHRNQAGTGPSALRSGR |
| l | | | l | l | | P*CLSRANPPGSKRSAGPVHEE |
| | | | 1 | l | | RT*PCRLSGSAGITQ*DGN*KAG |
| 1 | 1 | | l | | | PRVPEAPERGCATC |
| L | | Ц | | | _ | |

| SEO ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| 1 | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| ĺ | | | | sequence | 9.9 | |
| 5335 | 35703 | ĪA | 5377 | 3 | 313 | QNDEVAFRKLKLIJEDVQGKSY |
| | | | | | | LTNFHGMNLTHDKMCSMVKK |
| ĺ | 1 | l | | | | WOTVIEAHVDVKTTNGYLLCL |
| ĺ | | l | | | | FCVGFTKKCNNQIWKTSLF*00 |
| ĺ | | 1 | | | | SNMEDFFVLTTGIISHLHEPFLV |
| ĺ | | 1 | | | | VTDYDQ |
| 5336 | 35704 | Λ | 5378 | 45 | 764 | TSFLTTGGKKGS\KKKVVDPFS |
| | | l | | | | KKD/WL*YVKHRAMFNIRNIGK |
| | | 1 | | ŀ | i | DVGSPRTOGTKIAS\DGLKG\RV |
| 1 | | l | | • | | FE\VSLADLQNDEVAFRKFKLIT |
| 1 | | l | | 1 | | \EDVQGK\NC\LTNFHGMDLTP* |
| | | 1 | | | | QKCCSMVKKM/WQTMI*SSPL |
| ĺ | | | | l | | MVKTT\DGLLASVCSCVGFTKK |
| | | | | i | | \RNNQIRKTSYAQHQQVRQIRK |
| | | | | 1 | | KMMEIMTREVOTNOLKEVVNK |
| | | | | I | | LIPDSIGKDIEKACQSIYPLHDVF |
| | | l | | 1 | | VRKVKMLKKPKFELGKLMELH |
| | | l | | | | GEGS |
| 5337 | 35705 | Α | 5379 | 3 | 501 | SSARFVSSSSSGGYGGGYGGVL |
| ĺ | | l | | | | TASDGLLAGNEKLTMQNLNDR |
| | | l | ľ | | | LASYLDKVRALEAAKILSDMRS |
| | | l | ŀ | | | QYEVMAEQNRKDAEAWFTSRT |
| | | ļ | | | | EELNREVAGHTEQLQMSRSEV |
| | | 1 | | | | TDLRRTLQGLEIELQSQLSMKA |
| | | l | | | | ALEDTLAET/EGDVRADSERQN |
| | | ı | | | | QEYQRLMDIKSRLEQE |
| 5338 | 35706 | Α | 5380 | 1 | 716 | AQLKVKFWYWPEAGAGGLRR |
| | | ĺ | | | | FKHY\YTPFKDCRDKILGATIKN |
| | 1 | l | | | | SRIVLQIDNAGLAADDFRTKFE |
| | | l | | | | TEQALRMSV*ADITGLRRVLDE |
| | 1 | 1 | | | | LTLARTDLEMQIEGLKEELAYL |
| | | l | | | | KKNHEEEISTLRGQVGGQVSVE |
| | İ | 1 | | | | VDSAPGTDLAKILSDMRSQYEV |
| | | | 1 | | 1 | MAEQNRKDAEAWFTSRTEELT |
| 1 | 1 | | | | l . | REVAGHTEQLQMSRSEVTDLR |
| | 1 | | | | | RTLQGLEIELQSQLSRLWGFCC |
| | | 1 | l | | | PLEGVFWVEGWEGRDPYPRLF |
| 5339 | 35707 | Α | 5381 | 3 | 832 | |
| 5340 | 35708 | В | 5382 | 141 | 1067 | |

| SEQ ID | SEO ID NO: | Met | SEO ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \-possible nucleotide insertion) |
| | | | | sequence | | |
| 5341 | 35709 | A | 5383 | 13 | 1316 | GVAPSVLRLAMTSYSYROSSAT |
| 2241 | 33707 | ľ^ | 3363 | ľ | 1.5.0 | SSFGGLGGGSVRFGPGVAFRAP |
| | | | | | | SIHGGSGGRGVSVSSARFVSSSS |
| | | ŀ | | | | SGAYGGGYGGVLTASDGLLAG |
| | | ŀ | | | | NEKLTMQNLNDRLASYLDKVR |
| | | 1 | | | | ALEAANGELEVKIRDWYOKOG |
| | | 1 | | | | PGPSRDYSHYYTTIQ\ELRDKIL |
| | | 1 | | | | GATIENSRIVLQIDNARLAADDE |
| ł | | 1 | | | 1 | RTKFETEQALRMSVEADINGFR |
| | į | 1 | | | | RVLE*S*TLAQEPNLEDARIEG |
| | ļ | ı | | | | LKEE/LAYLKKNHEEEISTLKGP |
| | | 1 | | | ŀ | KCEAQV\SVEVD\SA\PGTRSSPK |
| l l | | 1 | | | | |
| | | 1 | | | | ILSDMRS\QYEVMAEQ\NRKD\A |
| | | 1 | | | | EA\WFT\SR\TERIETREVAWPHR SSFOMSOAPRLLDLAAATPOGS |
| | | 1 | | | | *DLSCQSQLEPLKAALGKTPLA |
| | | 1 | | | 1 | ENRKA\RFGNPQLAPYPQALDS |
| | | 1 | | | | |
| | | 1 | | | | AVI*KPQLG/DIVAKLDSSTGRI QEYQ\RL\MDIKFARLEQEIAHP |
| | | 1 | | | | NRSLA/LEGOEDHYNN\LFASK |
| 5342 | 35710 | A | 5384 | 23 | 279 | GCLRGSLERCGTLCKI\SLHEISG |
| 3342 | 35/10 | A | 3384 | 23 | 2/9 | PESRVO\QPLSSREEEEEEEEE |
| | | | | | | EEEEEEEEEEEEEEEEEEKK |
| | | | | | | ECSKAQCKHFPLSEVL |
| 5343 | 35711 | A | 5385 | 1 | 507 | MEKNEKEQEEEEKKEKNSKKK |
| 3343 | 33711 | ^ | 3363 | [' | 307 | EEEEEEGGGEEEEEGEGGEE |
| | | | | | | EEBEEEEEEEEEEEEEEE |
| | ł | | | | | EEE/EEEEEEEEEEEEEEE |
| | | | | | | EEEEEEEEEEEEEEKKKKKK |
| | | | | | | KKKKKKKKKKKKKKKKK |
| 1 | | | | | | RKKKKKEEEEKVVEEEDEFIWF |
| | 1 | | | | | LGNSLYFPSFSHFAWSOIPSRED |
| 1 | | 1 | | | ĺ | EGERRLRVNSMIMDFTSNTNH |
| 5344 | 35712 | A | 5386 | 3 | 259 | |
| 5345 | 35713 | Α | 5387 | 53 | 387 | LEEEKEEEKEEEKEEEKE |
| | İ | 1 | | | | KE/DEEGEEGEGEGEEGE |
| 1 | | 1 | | | | EEEEEEEEEEEEEEE |
| | | | | | | EEEEEEEEEEEEEEE |
| | 1 | 1 | | | | EEEEEEEEEEEEEEEE |
| | | | | | | EEEEEEEEMIVLKIIVAKQLF |
| 5346 | 35714 | В | 5388 | I | 1446 | |
| 5347 | 35715 | Α | 5389 | 3 | 122 | |
| 5348 | 35716 | Α | 5390 | 239 | 432 | CLWLFQEEEEEEEEEED*EEE |
| | | 1 | | | | EEE/EEEEEEEEEEEEEE |
| | 1 | 1 | ĺ | | | EEEEEEEEEEEEEEEE |
| | | | l | | | FLGHRVGI |
| 5349 | 35717 | В | 539I | I | 1269 | |
| 5350 | 35718 | В | 5392 | 44 | 244 | |

| SEQ ID | | | SEQ ID NO: | | | Amino acid sequence (X=Unknown, |
|--------|------------------------|-----|-----------------------|--|--|---|
| NO: | of peptide sequence | hod | in USSN 09/540,217 | location of first codon for peptide sequence | codon for last amino acid of peptide sequence | *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
| 5351 | 35719 | ĪA. | 5393 | 1 | 626 | EEGEVEEEGEEEEEEGEGEE |
| 555. | 155715 | 1 | 3373 | l' | 020 | EEEEGEGEGEGEGEEEEE |
| | 1 | 1 | | | | EEEEEEEEEEEEEEE |
| | 1 | | | | | EEEEEEEEQEEEEEEEEE |
| | | | | | | EE\EEAAAAAAAASRDSHTSLEL |
| | | | | | | TYWPPCPALRDTLVSNCSLSSI. |
| | | | | | | CTSGDSFHW*ETTIPAMSSCSH |
| | | | | | | QHSLHQLGIIPRQILMRMASLM |
| | | 1 | | | | RRIC\EDHPATAEQ**HV*GPPD |
| 5352 | 35720 | Α | 5394 | 2 | 506 | |
| 5353 | 35721 | Α | 5395 | 1 | 480 | |
| 5354 | 35722 | A | 5396 | 1 | 492 | |
| 5355 | 35723 | Α | 5397 | 1 | 870 | |
| 5356 | 35724 | A | 5398 | 111 | 407 | |
| 5357 | 35725 | Α | 5399 | 1 | 651 | |
| 5358 | 35726 | В | 5400 | 1 | 2427 | |
| 5359 | 35727 | Α | 5401 | 571 | 966 | SPFTNSRLTIFISFSECGQIAEIYI |
| | | 1 | | | | LSQPFMVRIMATEPPIINLQPGN |
| | 1 | 1 | | | | FTLDIVSRDHTTAL*PGRQEQNS |
| | 1 | 1 | | | | VSKKKEEEEEEEEEEEEEE |
| | | 1 | | | | EEEEEEEEEEEEE |
| | | 1 | | | | EEEEEEEEEEEEEEE |
| | | 1 | | | | EEEEEEEEEEEEEEKKKK |
| 5360 | 35728 | Α | 5402 | 1 | 1674 | |
| 5361 | 35729 | Α | 5403 | 1 | 306 | |
| 5362 | 35730 | A | 5404 | 2 | 431 | |
| 5363 | 35731 | Α | 5405 | 1 | 585 | |
| 5364 | 35732 | Α | 5406 | 1 | 708 | |
| 5365 | 35733 | A | 5407 | 3 | 595 | |
| 5366 | 35734 | Α | 5408 | 287 | 659 | |
| 5367 | 35735 | A | 5409 | 1 | 633 | |
| 5368 | 35736 | Α | 5411 | 3 | 634 | |
| 5369 | 35737 | A | 5412 | 344 | 481 | |
| 5370 | 35738 | Α | 5413 | 1 | 525 | |
| 5371 | 35739 | A | 5414 | 1 | 501 | |
| 5372 | 35740 | Α | 5415 | 12 | 461 | a GGI BIOGEDVENICO GGOVENI |
| 5373 | 35741 | Α | 5416 | 302 | 567 | MLCCLEISSTRYPKSSLSSSKFH |
| | | 1 | İ | | | KSLGQGQNAASLFAKT*RESPL |
| | l | 1 | | | | LQFPASSSSPSETTSAWTLLFISL |
| | | ١. | | | 0.11 | SAFLTKAFNKSLGGSKLSH |
| 5374 | 35742 | A | 5417 | 251 | 844 | NLGRGSQTSILDFCAPAGLIPCG |
| | | 1 | | | | SCQGLGLPHSEATARAVYWPL |
| | | 1 | | | | SAMAGVAGTQGTKSLDSSLFA |
| | | | | | | KT*QESPLLRFPTSSSSPSETTSA |
| | | 1 | | | | FILLFISLSEFLSKPFNKSLGGSK |
| | | | | | | LSHIFVSSSEPSKLSQPLHMPIQ |
| | 1 | 1 | | | | ARISSFTSGHTDDSTVLFSVLLK |
| | | | | | | LPLPVPSQAFSLKPGSIVMLLSS |
| | I | ١. | | ļ.——— | | WSDNFNIPSISDSDA |
| 5375 | 35743 | A | 5418 | 1 | I113 | |
| 5376 | 35744 | A | 5421 | 1 | 337 | |

| SEQ ID NO: | SEQ ID NO: of peptide sequence | | SEQ ID NO: in USSN 09/540,217 | Nucleotide location of first codon for peptide sequence | Nucleotide location of last codon for last amino acid of peptide sequence | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
|---------------|--------------------------------------|---|-------------------------------------|--|---|--|
| 5377 | 35745 | Α | 5422 | 2 | 680 | |
| 5378 | 35746 | Α | 5423 | 144 | 373 | |
| 5379 | 35747 | A | 5424 | 1 | 597 | |
| 5380 | 35748 | A | 5425 | 3 | 3319 | |
| 5381 | 35749 | A | 5426 | I | 612 | |
| 5382 | 35750 | С | 5427 | 46 | 168 | |
| 5383 | 35751 | Α | 5428 | 1 | 663 | |
| 5384 | 35752 | A | 5429 | 10 | 417 | IAIMNOTVAIRTREFMTNRLLE RKQMVIDVLHPGKATVPKTEIL EKLAQMYKTTPDVIFVFGFRTH CGGGKTTGFGMIYDSLDYAEK NEPKHRLARHGLYEKKKTS*K QRQERTNRMKKVRGTAKANV VAG*KPNE |
| 5385 | 35753 | A | 5430 | 67 | 263 | GKTTG\FGMIY\DCLDYAKKNE PKHRRARHGLYEKKKTSRKQR KERKNRMKKVRGTAKANVGA GKK |
| 5386 | 35754 | A | 5431 | 2 | 537 | TPOSITITIK PPTASTSEDRSPIM NOITVTIPH*EKFMTQPTYFRGN QMVIDVLSPPGKGDQCPKHRK FGKKLAQNVPRPTPDVIFVFWI VOFFIGGERTTG-FIGMIYGFPGI YAKEKMNPDHRLCKDMGLVL RKEKGPSRKANGKGTARNRIG RKVPGGTGKGPNVGCWAKRR NEVSSS |

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| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | Ì | sequence | | |
| 5387 | 35755 | A | 5432 | 1 | 2195 | ARGLSMGH*FP/PHFQCALA*M |
| | | | | | | PAPGRGPPPPLPP/CPDAPPACA |
| | l | | | | | ATMERPEAGLRVAPRSPVOPG6 |
| | | | | ŀ | | TSVLPVAKRFNARILWLKRPOF |
| | | 1 | | | | QLWSLWRAQATVSLGGFHVM |
| | | | | | LSLQVHRINARVKEAWQLPPRI | |
| | | | l | | | QMMYQKAWVLRQKPAAAVEI |
| | 1 | | | ŀ | | SQRNSPRAMLGGNVGLEPPPRV |
| | | | | ľ | | STRALPSGAVGRGLPPSRPKND |
| - | 1 | | | | | TATGSLHPELGKAADIQFHPVR |
| | | | i | | | AATGASPCKSIGTELPKALGAH |
| | 1 | | l | 1 | | VLLQCALDVGHGVEGELWSFK |
| | | | | | | TRQPSDFSIFSPPFPPFYSTKPPL |
| | | | | ŀ | | SWPIPNEPLGTPPRRGRGGAEG |
| | | | | I | | LLTSQCSHILNGLCFTGGINSNE |
| | | İ | | l | | CENVSRKKKMSEEFEANTMDS |
| | | | | | LVDMPFATVDIQDDCGIFFDVV | |
| | | 1 | | | | KLRVNCQEILANRHPGRAMRK |
| | | | | | VVLTKTSWEGESLAVGKLPLK | |
| | | | | į. | | RLVSLDCQLRCLQCECGILIRQ |
| l | | | | | | HVVWLERTTGHWHPRSSQSCR |
| | | | | l . | | LNTTSTALEHCNAFIYNTVCSH |
| | | i | | l . | | KLKDHSHDNGKSSGFLNPVAA |
| | | | | | | PHSCIVMGHLTLLITTSYYTPLT |
| | İ | | | l . | | KPDTDPTLKKEGLISQDSSSLEV |
| | | | | | | LLHTDPLGKRGTPDPRVDDDSI |
| | | | | 1 | | GKFPVTNSQARKRILEPDDFLD |
| | | 1 | | | | DLDDEYCEDAPKHRGKGCGSA |
| | Ì | | l | | | HKELDASNLEDQDKPYACDIC |
| | Į. | 1 | | l | | GKRYKNRPGLSYHYAHSHLAE |
| l | | i | | | | EGEDKEDSQPPTPVSQRSEEQK |
| | | 1 | | | | SKKGPDGFALPNNYCNFCLGN: |
| 5388 | 35756 | A | 5433 | 1 | 580 | FSPLIHLILSGHSTCFREHRVGG |
| | | | | | | KVTDQQDPKAEEFFLVQNKMK |
| l | | İ | | | | SLPCLLLSTQTRQPSDFSIFSPPF |
| | | | | | | PPFYSTKPPLSSWPVLNELLGTF |
| | | İ | | | | PRRGGGRAEG/PPHFPVG\GPGR |
| | i | | | | | GAPSPPRRGGWPGGGLTPQPPS |
| | | | | Į. | | RTGRLAGRGADPPTSLPDGAA |
| | | | | | | GRAGG*PHHLPPGRGGWPGRG |
| | | | | 1 | | APHFPVGVAGQRRLFIC |
| 5389 | 35757 | Α | 5434 | 405 | 685 | KVSHVYFYPHRPRNHPISQFFPH |
| | | | | | | PSRLSIPQNRHCHHGPS/RNEPL |
| | | | | 1 | | GTPPR/PGSWPGRGAPHFPETFN |
| 1 | 1 | 1 | 1 | | | HGRRWKGSRHVFTWPEQERE |
| | | L | L | | | WGSATHF |
| 5390 | 35758 | A | 5435 | 1 | 654 | |
| 5391 | 35759 | Α | 5436 | 1 | 426 | |
| 5392 | 35760 | Α | 5437 | 1 | 548 | |
| 5393 | 35761 | A | 5438 | 1 | 459 | |
| 5394 | 35762 | Α | 5439 | 11 | 346 | |

| SEQ ID NO: | SEQ ID NO: of peptide sequence | Met hod | SEQ ID NO: in USSN 09/540,217 | Nucleotide location of first codon for peptide sequence | Nucleotide location of last codon for last amino acid of peptide sequence | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide deletion, \-possible nucleotide insertion) |
|---------------|--------------------------------------|------------|-------------------------------------|--|---|---|
| 5395 | 35763 | A | 5440 | i | 1248 | |
| 5396 | 35764 | A | 5441 | I | 1257 | |
| 5397 | 35765 | Α | 5442 | I | 1659 | MGDFNTPLSTLDRSTRQKVNK |
| | | 1 | | | | DTOELNSALHOADLIDIYRSLH |
| | | l | 1 | | [| AKSTEYTFFSAPHHTYSKIDHIL |
| | | l | | | | GSKALLSKCKRTEIITNYLSDHS |
| | | l | | | ļ | AIKLELRIKNLTQNRSTTWKLN |
| | | 1 | | | i | NLLLNDYWIHDEMKAEIKMFF |
| | | l | | | | ETNENKDTTYQNLWDAFKATA |
| | | l | | | | SKTNKEKEKNQIDTIKNDKGDI |
| | | l | | | 1 | TTDPTEIQTTIREYYKHLYANK |
| | 1 | l | | | ł | LENLEEMDKFLDTYTLPRLNQE |
| | | ı | | | | EVESLNRPITGAEIVAIINSLPTK |
| | 1 | 1 | | | i | KSPGPDGFTAEFYQRYKEELHI |
| | | 1 | | | ŀ | NRAKDKNHMIISIDAEKAFDKI |
| | 1 | 1 | | | ł | QQPFMLKTLNKLGIDGTYFKIIR |
| | | 1 | | | | AIYDKPTANIILNGQKLEAFPLK |
| | 1 | 1 | | | į . | TGTRQGCPLSPLLFNIVLEVLAR |
| | | | | | | AIRQEKEIKGIQLGKEEVKLSI.F |
| | | | | | | ADDMTVYLENPIVSAQNLLKLI |
| | | l | | | | SNFSKVSGYKINVQKSQAFLYT |
| | | ŀ | | | | NNRQTESQIMSELPFTIASKRIK |
| | | | | | | YLGIQLTRDVKDLFKENYKPLL |
| | | l | | | | KEIKEDTNKWKNIPCSWVGRIN |
| | | 1 | | | | IMKMAILPKVIYRFNAIPIKLPM |
| | l | | | | | TFFTELEKTTLKFIWNQK\RARI |
| | | 1 | | | | AKAILSQKNEAGGITLP |
| 5398 | 35766 | Α | 5443 | 1007 | 1719 | TEPKTKTT*LSQ*MQKKPLTKF |
| | | l | | | | NNPSC*KLSIN/IVLEVLARAIRQ |
| | | l | | | | EKEIKGIQLGKEEVKLSLFADD |
| | | | | | | MIVYLENPIVSAQNLLKLLSNFS |
| | | l | | | | KVSGYKINVQKSQAFLYTNNR |
| | ı | | | | | QTESQIMSELPFTIASKRIKYLGI |
| | | | | | | QLTRDVKHLFKENYKPLLKEIK |
| | | | ĺ | | | EDTNKWKNIPCSWV\GRINIVK |
| | | | | | | MAILPKVIYRFNAVPIKLPMTFF |
| | | | | | i | TELEKTTLKFIWNQKRACIAKSI |
| | | | l | | | LSQKNKAGGITLP |
| 5399 | 35767 | В | 5444 | 1 | 1020 | |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \-possible nucleotide insertion) |
| | | | | sequence | | |
| 5400 | 35768 | A | 5445 | 1 | 1576 | MDKFLDTYTLPRLNOEEVESLN |
| 15.00 | 33700 | ľ. | | ľ | | RPITGAEIVAIINSLPTKKSPGPD |
| | | 1 | | | | GFTAEFYORLISNFSKVSGYRIN |
| | | 1 | | | | VOES\OAFLYTINROTESOIMSA |
| | | 1 | | | | LPLTIASKRIKYLGIOLTROVKD |
| | ŀ | | ì | | | LFKENYKPLLNEIKEDTNKWK |
| | | 1 | | | | NIPCSWVGRINIVKMAILP/KEL |
| | l . | | | | | EETTLKFIWNQKRARIAKSILSO |
| | | | ŀ | | | KNKAGGITLPDFKLYYKATVT |
| | İ | | | | | KTAWYWYONRDRDOWNRTEP |
| | | | | | | SEIMPHIYNYLIFDKPEKNKQW |
| 1 | 1 | | | | | GKDSLFNKWCWENWLAICRKL |
| | | | | | | KLDPFLTPYTRINSRWIKDLHV |
| ł | ŀ | | | | | RRKTIKTLEENLGNTIQDIGMG |
| | | | | | | KDFMSKTPKAMATKAKIDKW |
| | | l | | l | | DLIKLKSFCTAKETTIRVNRQPT |
| | İ | | | | • | KWEKIFATYSSDKGLISRIYNEL |
| 1 | i | | | | | KQIYKKKTNNPIKKWAKDMNR |
| | | | | | | HFSKEDIYAAKKHMKKCSSSLA |
| | | | | | | IREMQIKTTMRYHLTPVRMAII |
| | | | | | | KKSGNN/R/CAPGTPERQNHSLS |
| | i | 1 | | | | WKGS*SQEPSGLAQWIPLPWSP |
| | | Į. | | | | AS*DPLA*NSCCQHSCLKSTWD |
| | | | | | | AQACARKLRTLIKGYRNCQLE |
| 5401 | 35769 | Α | 5446 | 1 | 984 | |
| 5402 | 35770 | A | 5447 | 1 | 1563 | |
| 5403 | 3577I | Α | 5448 | 1 | 1449 | |
| 5404 | 35772 | В | 5449 | 1 | 1605 | |
| 5405 | 35773 | В | 5450 | 1 | 1569 | |
| 5406 | 35774 | Α | 5451 | 1 | 690 | MSELPFTIASKRIKYLGIQLTRD |
| | | | | | | VKDLFKENYNPLLNEIKEDTNE |
| | | | | | | WKNIPCSWVGRINIVKMAILPK |
| | | | | | | ATVTKIAWYWYQNRDIDQWN |
| | | 1 | | | | RTERSEIMPHIYNYLIFKKPEKN |
| | | 1 | | | | KQWGKDSLFDKWCSENWLAIC |
| | | 1 | | | | RKLKLDPFLTPYTKINSRWIKD |
| | | l | | | | LNVRPKTIKTLEENLGITIQDIGI |
| | | 1 | l | | | GKDFMSKTPKAMATKAKIDK |
| | | 1 | | | | WDLIKLK\FCTAKETTIRVNRQS |
| | 2.000 | ١. | 5.152 | l | 1010 | TKWEIISSLD |
| 5407 | 35775 | A | 5452 | 1 | 1919 | |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X-Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | l | | sequence | | |
| 5408 | 35776 | - | 5453 | , | 1416 | MIILIDAEKAFDKIQQPFMLKTL |
| 3408 | 33770 | Α | 3433 | I | 1410 | SKLGTDGTYLKIIRAIYDKPTAN |
| | | | | | | IILNGOKLEAFPLKTGTROGCPL |
| | | ŀ | ŀ | | | |
| | | | | | | SPLLFNIGLEDLARAIRQEKEIK |
| | | 1 | 1 | | | GIQLGKEEVKLSLFADDMIVYL |
| | | | | | | ENPIVSAQNLLKLISNFSKVSGY |
| | | | | | | KINVQKSQAFLYTNNRQTESQI |
| | | | | | | MSELPFTIASKRIKYLGIQLTRD |
| | | | | | | VKDLFKENYKPLLKEIKEDTNK |
| | 1 | | | | | WKNIPCSWVGRINIVKMA1LP\R |
| | | | | | | DIDQW/NRTEPSEIMPHTYNYLI |
| | | | | | | FDKPEKNKQWGKDSLFHKWC |
| | | | | | | WENWLAVCRKLKLDPFLTPYT |
| | | | | | | KINSRWIKDLNIRPKTIKTLEEN |
| | | | | | | LGITIQDIGVGKDFMSKAPKAM |
| | | ĺ | | | | ATKAKIDKWDLIKLKSFCTAKE |
| | | l | | | | TTIRVNRQPTTWEKIFATYSSD |
| | | l | | | | KGLISGIYNELKQIYKKKTNNPI |
| | | | ŀ | | | KKWAKDMNRHFSKEDIHAAK |
| | | | | | | KHMKKCSSSLAIREMDIKTTMR |
| | | | | | | YHLTPVRMAIIKKSGNNRCWR |
| | | | | | | GCGEIGTL |
| 5409 | 35777 | В | 5454 | 1 | 810 | |
| 5410 | 35778 | В | 5455 | 1 | 1277 | |
| 5411 | 35779 | В | 5456 | 130 | 1701 | |
| 5412 | 35780 | Α | 5457 | 1 | 1395 | |
| 5413 | 35781 | Α | 5458 | 3 | 1646 | |
| 5414 | 35782 | A | 5459 | 1 | 759 | |
| 5415 | 35783 | A | 5460 | 2821 | 5781 | |
| 5416 | 35784 | В | 5461 | 1 | 2025 | |
| 5417 | 35785 | Α | 5462 | 1 | 3663 | |
| 5418 | 35786 | В | 5463 | 1 | 2265 | 1 |
| 5419 | 35787 | Α | 5464 | 1 | 2241 | |
| 5420 | 35788 | Α | 5465 | 1 | 2478 | |
| 5421 | 35789 | A | 5466 | 1 | 2067 | |
| 5422 | 35790 | A | 5467 | 1 | 2988 | |
| 5423 | 35791 | В | 5468 | 1 | 2061 | |
| 5424 | 35792 | Α | 5469 | 1 | 2141 | |
| 5425 | 35793 | Α | 5470 | 1 | 400 | |
| 5426 | 35794 | A_ | 5471 | 2 | 2507 | |
| 5427 | 35795 | Α | 5472 | 1 | 768 | |
| 5428 | 35796 | Α | 5473 | 1 | 1527 | |
| 5429 | 35797 | Α | 5474 | 1 | 1293 • | |
| 5430 | 35798 | Α | 5475 | 1 | 1038 | |
| 5431 | 35799 | Α | 5476 | 1 | 1572 | |
| 5432 | 35800 | Α | 5477 | 1 | 1290 | |

| SEO ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------------|----------------|--------|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *-Stup codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 5433 | 35801 | A | 5478 | 1 | 524 | MSELPFRIASKRIKYLGIOLTRD |
| 13433 | 33601 | Ι^ | 3478 | ' | 324 | VKDLFKENYKPLLNEIKEDTNK |
| | | | | | | WKNISCSWVGRINIVKMAILPK/ |
| | | | | | | |
| | | | | | | VKHR/FSACLQSLGRSGTTGLE |
| | | | | | | ALAM*PIWPQEVE*VKFPALPS |
| | | | | | | GASSTKGGCVP*QIQVEERLLS |
| | | | 1 | | | WKL*QA*TSW\YQRQRRSDSSL |
| | | _ | | | | RERK*PKSIQRNVRRLSYYTP |
| 5434 | 35802 | A | 5479 | 2 | 1547 | |
| 5435 5436 | 35803 35804 | A | 5480 | 1 | 2376 1824 | |
| 5437 | | A | 5481 | 1 | 1071 | |
| 5438 | 35805 35806 | A B | 5482 | 1 | 1839 | |
| 5439 | 35807 | В | 5484 | 1 | 1368 | |
| 5440 | 35807 | A | 5485 | 1 | 1884 | ļ |
| 5441 | 35809 | A | 5486 | 1 | 1053 | |
| 5442 | 35810 | В | 5487 | 1 | 2532 | |
| | 35811 | A | 5488 | 1 | 2373 | |
| 5444 | 35812 | A | 5489 | 1 | 2361 | |
| 5445 | 35813 | A | 5490 | 1 | 2274 | |
| 5446 | 35814 | A | 5491 | 1 | 1686 | MASPGPAPTASPKIHSELLTATR |
| 3440 | 33014 | n | 5471 | ļ . | 1000 | EAQRHHPVPRGQDLVTSESFSL |
| | | | | | | SFCFSAAIFIFELLGSNSEGVTDL |
| | | | | | ł | RLWLCOPAPRCGEWTYNPLEO |
| | 1 | | | | | CCDDGVILDLNQTRLCGSSCTF |
| | | | | | | WPCFOHCCLESLGSONOTVVRF |
| | | | | | | KVPGMKPDCKSSPITRICAQAG |
| | | | | | | |
| | | | | | | VQISNFSKVSGYKINVQKSQAF |
| | - 60 | | | | | LYTNNRQTESQIMSELPFTIASQ |
| | | | | | | RIKYLGIQLTRDVKDLFKENYK |
| | | | | | | PLLKEIKEDTNKWKNIPCSWVG |
| | | | | | | RINIVKMAILPKVIYRFNAIPIKL |
| | | | | | | PMTFFTELEKTTLKFIWNQKRA |
| | | | | | | LIAKSILSQKNKAGGITLPDFKL |
| | | | | | | YYKATVTKTAWYWYQNRDID |
| | | | i | | | QWNRTEPSEITPHIYNYLIFDKP |
| | | | | | | EKNKQWGKDSLFNKWCWENW |
| | | | | | | LAICRKLKLDPFLTPYTKINSRW |
| | | | | | | IKDLNVRPKTIKTLEENLGITIQ |
| | | | | | | DIGMSKDFMSKTPKAMATKDK |
| | | | | | | IDKWDLIKLKSFCTAKETTIRV\ |
| | | 1 | | | | NRQPTKWEKIFATYSSDKGLIS |
| | | | | | | RIYNELKQIYKKKTNNPIKKWA |
| | | 1 | | | | KDMNRHFSKEDIYAAKKHMK |
| | | | | | | KCSLSLAIREMQIKTTNQNH\M |
| L . | | L | | | | RYHLTPGHG |
| 5447 | 35815 | Α | 5492 | 1 | 1872 | |

| SEQ ID NO: | SEQ ID NO: of peptide sequence | | SEQ ID NO: in USSN 09/540,217 | Nucleotide location of first codon for peptide sequence | codon for last amino acid of peptide sequence | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
|---------------|--------------------------------------|---|-------------------------------------|--|--|--|
| 5448 | 35816 | A | 5493 | 195 | | PPGOHLORRCLLEVSGFSENAK KGMLEVLARAINGCKEKIKG GKEEVKLSLFADDMIVYLENPI VSAQNLLKLISNFSKALGYKISG OKSQAFLYTNRQTESGIMSEL PFTIASKRIKYLGIQLTRDVKDL FKENYKPLLNEIKEDTNK WKNI PCSWIGRINIVKMAILPKVIYGF NAIPIKLPMTFFTELEKTILKFI WNQKRARIAKSILSQKDKAGGI TLPDFKLYYKATVTKTACNSN GSQSPWMEEQIRDA WGSMYLK NVVRETDEVGKGQIRMRTVFE QAIDQRSSTIDTSLSTPAAPMVD SLIARVGYMARGNAITLPVCGR DVKFTLEVLRODSVEKTSRVW SGNERDQELLTEDALDDLIPSFL LTGQQTPAFGRRVSGVIEIADG SRRRKAAALTESDYRVLGGEL DDEOMAALSKLIGDP |
| 5449 | 35817 | Α | 5494 | 1 | 1845 | |
| 5450 | 35818 | Α | 5495 | 1 | 2109 | |

643

| SEQ ID NO: | SEQ ID NO: of peptide | | SEQ ID NO: in USSN | Nucleotide location of first | Nucleotide location of last codon for last amino acid | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide |
|---------------|--------------------------|---|-----------------------|---------------------------------|--|---|
| | sequence | | 09/540,217 | | of peptide sequence | deletion, \-possible nucleotide insertion) |
| ł | | | | sequence | | |
| 5451 | 35819 | A | 5496 | I | 2535 | MKSGHPEKEQDNSDVQETREIT |
| i | | | İ | | | IRGLLCTALMRHSTGAIAYLGV |
| | | | | | | LSGSASLKLAGVPLRCCEGDKD |
| | | | | | | AGHPLETQTALCERGRGARSLV |
| | | | | | | GNTIMTSQPVPNETIIVLPSNVIN |
| | | | | | | FSQAEKPEPTNQGQDSLKKHLH |
| | | | 1 | | | AEIKVIGVNLIQNVLERGWGKC |
| | | | | | | QEMIYVLGLDICRPFFVSRVSEE |
| | | | | | | GRMGQRGEEDANSLDFPPASLL |
| | | | | | | CLICQEQGVNGESCSPVGMYH |
| i | | | | | | REIVPVYEVLSVITGLQIQVFSG |
| | | | | | | KEADSVIKRSIGWGPFFKPRTK |
| 1 | | | | | | DKNHMIISIDAEKAFDKIQQHF |
| | | | | | | MLKTLSKLGIDGTYLKIIRAIYD |
| 1 | | 1 | | | | KPTANIILNGQKLEAFPLKTGTR |
| | | ı | | | | QGCPLSPLLFNIVLEVLARAIRQ |
| | | ł | | | | EKEIKGIQLGKEEVKLSLFADD |
| | | l | | | | MIVYLENPIVSDQNLLKLISNFS |
| | | l | | | | KVSGYKINVQKSQAFLYTNNR |
| | | l | | | | QTESQIMSELPFTIASKRIKYLGI |
| | | 1 | | | | QLTRDVKDLFKENYKPLLNEIK |
| | | l | | İ | | EDTNKWKNIPCSWVGRINIVK |
| 1 | | | | | | MAILPKVIYRFNAIPIKLPMTFF |
| | | l | | | | TELEKTTLKFIWYQKRARITKSI |
| | | l | | | | LSQRNKAGDITLPDFKLYYKAT |
| | | l | | | | VNKTAWYWHQNRHIDQWNRT |
| | | l | | | | KPSEITLHIYNYLFFDNPDKNKK |
| | | l | | | | WGKDSLFNKWCWENWLAICR |
| | | l | | | | KLKLDPFLTPYTKINSRWIKDL |
| | | 1 | | | | NIRPKTIKTLEENLGITIQDIGMG |
| | | l | | | | KYFMTKTPKAMATKAKIDKW |
| | | _ | | | | DLIKLKSFCTGKETTIRVNRQPT |
| 5452 | 35820 | A | 5497 | 3 | 2284 | |
| 5453 5454 | 35821 | A | 5498 5499 | I | 1245 | |
| 5455 | 35822 | A | 5500 | 383 | 1185 | |
| 5456 | 35824 | A | 5501 | 1 | 3159 | MLEVLAWAVROEKEIKGIOLG |
| 3430 | 33024 | ^ | 3301 | ' | 3137 | KEEVKLSLFADNMTVYLENPIV |
| | | l | | | | SAONLLKLISNFSKVSGYKVSG |
| | | ł | | | | QKSQALLYTNNRQTESQIMSEL |
| | | | | | | PFTIASKRIKYLGIHLTRDVKDL |
| | | 1 | 1 | | | FKENYKPLLKEIKKDTNKWKNI |
| | | 1 | | | | PCSWVGRINIVKMAILPKDIIOE |
| | | l | | | | , |
| | | 1 | l | | | NFPNLARQANIQIQEIRKTPQRY |
| | | 1 | | | | SSRRATPRHIIVRFTKVEMKEK |
| | | l | 1 | | | MLRAAREKASHHTYSKIDPILG SKPLLSKCKRTEIITNYLSDHSAI |
| | | | | | | |
| | | | L | L | | KLEFRIKNL |

| SEO ID | SEO ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | nf peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 5457 | 35825 | IA | 5502 | 583 | 2515 | MQKKPLTKFNNPSC*KLSIN*LI |
| | | | | | | SNFSEVSGYKISVQKSQAFLYT |
| | | 1 | | | | NNR/OESOIMSELPFTIASKRIKY |
| | | | | | | LGIQLTRDVKDLFKENYKPLLK |
| | | 1 | | | | EIKEDTNKWKNIPCSWVGRINI |
| l | | | | | | VKMAILPKAIYRFNAIPIKLPMT |
| l | ľ | | | | i | FFTELEKTTLKFIWNQKRARIA |
| | | | | | | KSILSQKNKAGGITLPDFKLYY |
| | | | | | | KATVTKTAWYWYONRDIDOW |
| 1 | | | | | | NRTEPSEITPHIYNYLIFDKPEK |
| ļ. | | 1 | | | | NKOWGKDSLFNKWCWENWLA |
| l | | 1 | | | | ICRKLKLDPFLTPYTKINSRWIK |
| | | 1 | | | | DLNVGPNTIKTLEENLGITIQDI |
| | | | | | | GTGKDFMSKTPKAMATKAKID |
| 1 | l | 1 | | | | KRDLIKLNSFCTAKETTIRVNR |
| 1 | | | | | | OPTKWEKIFTTYSSDKGLISRIY |
| | | | | 1 | | NELKQIYKKKTNNPIKKWAKD |
| | | | | | | MNRHFSKEHIYAAKKHMKKCS |
| | | 1 | | | | PSLAIREMQIKTTMRYHLTPVR |
| | | | | | | MAIIKKSENNSLLAAGGGNRRT |
| | | | | ł | | ANVVAHGFANLLTLDKKTLQEI |
| | | | | | | LVHYPDSERILMKKARVLLKQ |
| | | | | | | KAKTAEATPPRKDLALLFPPKE |
| | | | | | | ETPKLFKTLLGGTGKASLARLL |
| | 1 | | | | | KLKREQAAQKKENSEGGEEEG |
| | | 1 | | | | KENEDKQKENEDKQKENEDKG |
| | 1 | 1 | | | | KENEDKDKGREPEEKPLDRPEC |
| | | 1 | | | | TASPIAVEEEPHSVRRTVLPRGT |
| | į. | 1 | | | | SRQSLIISMAPSAEGGEEVLTIE |
| 5458 | 35826 | Α | 5503 | 1 | 2463 | |
| 5459 | 35827 | В | 5504 | 1 | 1221 | |
| 5460 | 35828 | A | 5505 | 1 | 4494 | |
| 5461 | 35829 | A | 5506 | 1 | 2825 | MARTSYGQHFFPTLISMNIDSG |
| 1 | | i i | | | | RQNNGIPKLSTSYSLKPMNTLC |
| | | l | | | | YLVKRDLEGVLKLRILTWESSL |
| 1 | | | | | | DYPGGPSVITKVLIRQKEGQSQ |
| | | | | | 1 | RTRYDNGSRGWSDAIAVKRPQ |
| 1 | | | | | | AKECGWPLEAGKGKEWILRKE |
| | | 1 | 1 | | | CIPANTLMLAQCPPTLRVGGSV |
| | | 1 | | | | CSAWRMIQNSDGERRKRNRIQL |
| | | 1 | l | | | QAVRLSKVIHDTFRNFPRFVHS |
| | | 1 | | | | RELSKGAEKSSSLKKGLEQVII |
| | | 1 | 1 | | | WTKCRQCGESRCTKKVEERKV |
| | | L. | | | | LHNTFISTSTTITTLG |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nuclcotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|----------|------------|-------------------|-----------------------------|---|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | l | 09/540,217 | codon for peptide | of peptide sequence | deletion, ≔possible nucleotide insertion) |
| | | | | sequence | | |
| 5462 | 35830 | Α | 5508 | 1184 | 4791 | TSMQKSSIKYWQTESSSTSKSLS |
| | | | | | | TMIKWASSLGCKAGSVYANO* |
| 1 | | | | | | M*SSI*TEPKTKTI*LSO*MOKK |
| l | | l | | | | PL/YKIQQPFMLKTLNKLAQNL |
| | | | | | | LKLISNFSKVSGYKINVOKSOA |
| 1 | 1 | | | | | FLYTNNRQTESQIMSELPFTIAS |
| | | | | | | KRIKYLGIOLTROVKOLFKENY |
| l | | | | | | KPLLKEIKEDTNKWKNIPCSWV |
| 1 | | | | | | GRINIVKMAILPQVIYRFNAIPIK |
| | | | | | | LPMTFFTELEKTTFKFIWNQKR |
| | | | | | | ARIAKSILSQKNKAGGITLPDFK |
| | | | Ì | | i | LYYKATVT |
| 5463 | 35831 | Α | 5509 | 516 | 2233 | |
| 5464 | 35832 | В | 5510 | 286 | 4131 | |
| 5465 | 35833 | В | 5511 | 1 | 4911 | |
| 5466 | 35834 | Α | 5512 | 1080 | 3119 | SSGLHPWDARLVQYTQINKCN |
| | | | | | | PAYKQSQRQKPHDYLNRCRKK |
| | | | | | | AFDKIQQPFMLQTLNKLGIDGT |
| | | | | | | YFKIIRAIYDKPTANIILNGQKLE |
| | | | | | | AFPLKTGTRQGCPLSLLLFNIVL |
| | | | | | | EVLARAIRQEKEIKGIQLGKEEV |
| | | | | | | KLSLFADDMIVYLENPIISAQNL |
| | 1 | | | | İ | LKLISNFSKVSGYKINVQKSQTF |
| | | | | | | LYNNNRQTESQIMSELPFTIALK |
| | | | | | | RIKYLGIQLTRDVKDLFKENYK |
| | | | | | | PLLKEIKEDTNKWKNIPCSWVG |
| | | | | ł | | RINIVKMAILPKVIYRFNAIPIKL |
| | | | | | | PMTFFTELEKTTLKFIWNQKRA |
| | | | | | | RIAKSILSQKNKAGGITLPDFKL |
| | | | ŀ | | | YYKATVTKTAWYWYQNRDID |
| | | | | | | QWNRTEPSEIMPHIYNYLIFDKP |
| | | 1 | | | | EKNKQWGKDSLFNKWCWENW |
| | | l | | | | LAICRKLKLDPFLTRYTKINSR |
| | | | | | | WIKDLNVRPKTIKTLEENLGITI |
| | | | | | | QDIGVGKDFMSKTPKAMAAKA |
| | | | | | | KIDKWDLIKLKSFCTAKETTIRV |
| | | | | | | NRQPTTWEKIFATYSSDKGLISR |
| | | | | | | IYNELQQIYKKKTNNPIKKWAK |
| 1 | | | | | | DMNRHFSKEDIYAAKKHMKK\ |
| | | | | | | CSSSLAIR\EMQIKTTMRYHLTP |
| 1 | 1 | | | | | VRMAIIKKSGNNRIRRHFQPRS |
| | 1 | | | | | AMFFCCCPGGEGSGLQWELLL |
| | 1 | | | | | AAWTVLPYPCPAATVGRFLKQ |
| 1 | | l | | | | AQTADHSFLGHVWRVPSSRSW |
| | | | | | | TDKEILSLVVNRQNQEVVQLIG |
| | | <u> </u> | l | | | GLCGTHTISPTQHPATG |

| SEQ ID NO: | SEQ ID NO: of peptide | | SEQ ID NO: in USSN | Nucleotide location of first | Nucleotide location of last codon for last amino acid | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide |
|---------------|--------------------------|-----|-----------------------|---------------------------------|--|---|
| NO: | sequence | noa | 09/540.217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | Jacque Lance | 1 | 05/010,217 | sequence | | |
| | <u> </u> | | } | | | |
| 5467 | 35835 | Α | 5513 | 2494 | 4549 | LQTILQGYSNSKQHGTGTKTA |
| | | | | | | WYWYQNRDIDQWNRTEPSEIT |
| | | | | | | PHIYNYLIFDKPDKNKKWGKDS |
| ŀ | | | | | | LFNKWCWENWLVICIKLKLDP |
| | | | | | ł | FLTPYTKINSRWIKDLNVRPKTI |
| ŀ | | | | | | KTIEENLGNTIQDIGMGKDFMS |
| l | | | | | | ETLKARATKAKIDKWDLIKLKS |
| İ | | | | | | FCTAKETTIRVNRQPTKWEKIF |
| | | | | | | AIYSSDKGLIPRIYKELKQIYKK |
| | | | | | | KTNSPIKKWVKDMNRHFSKEDI |
| | | | | | | YAAKKHMKKCSSSLAIREMQI |
| | | | | | 1 | KTAMRYHLTPVRMAI |
| 5468 | 35836 | Α | 5514 | 1 | 5582 | MGDFNTPLSTLDRSTRQKVNK |
| 1 | | | | | | DTQELNSALHQADLIDIYQTLH |
| | | | | 1 | ŀ | PKSTEYTFFSAPHHTYSKIDHIL |
| | | | | | | GSKALLSKCKRTQIITNYLSDHS |
| | | l | | | | AIKLELRIKNLTQNHSTTWKLN |
| | | | | | | NLLLNDYWVYNEMKAEIKMFF |
| | | | | | | ETNENEDTTYQNLWDAFKAVC |
| | | | | 1 | | RGKFIALNAHKRKQERSKIDTL |
| | | | | | | TSQLKELEKQEQTHSKASRRQE |
| | | l | | | | ITKIRAELKEIETQKTLQKINESR |
| | | 1 | | | | SWFFERINKIDRPLARLIKKKRE |
| | i | | | | | KNQIDTIKNDK |
| 5469 | 35837 | Α | 5515 | 3371 | 5375 | TDTSQKKTFMQPKKHMKKCSP |
| | | | | | | SLAIREMQIKTTMRYHLTPVRM |
| | | 1 | | | | AIIKKSGNNRSWYFEKINKIDRL |
| | 1 | | ŀ | | | LARLIKKKREKNQIDAIKNDKG |
| | | | | | | DITTDPTEIQTTTREYYKHLYA |
| | | | | | | NKLENLEEMDKFLDTYNLPRL |
| | | | | | | KQEEVESLNRPIRGSEIVAIINSL |
| | | | | | | PTKKSPGPDGFTAEFYHRYKEE |
| | | | | | | LVPLLLKLFQSIEKEVILPNSFYE |
| | | 1 | | 1 | | ASIILIPKPDRDTAKKENFRPISL |
| | 1 | | 1 | l | | MNIDAKILNKILANRIQQHIKKL |
| | | l | | | | IHHDQVG |

| O: of p | | tod | SEQ 1D NO: in USSN 09/540,217 | Nucleotide location of first codon for peptide sequence | Nucleotide location of last codon for last amino acid of peptide sequence | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
|---------|-----|-----|-------------------------------------|--|---|--|
| 358 | / / | A | 5516 | 314 | 2695 | GSACRDPDPDPLRLVGGGAAA PPCSSVSPSAWRQSR PREYYEG GGGLHAPDRETALGLGJATSER MLGIGGGRKFLAASLSILCIPA ITWIYLFSGSFEDGKPVSLSPLE SQAHSPRYTASSQRERESLEVR MREVEEENRALRRQLSLAQGR AFSHRRGNHSKTYSMEEGTGD SENLRAGIVAGNSSECGQQPVV EKCRRNPLHFRILDSIAGQILA LTEQTWWYPAVRVDFYYADEL KSEVSWIPNKHYSGIYGL MKLU LTKTLPANLERVIVLIDTDIFFAT DIAELWAVFHKFKGQQVLGLV ENQSDWYLGNLEWKNHRPWPA LGRGYNTGVILLLDKLKRMK WEQMWRLTAERELMGMLSTS LADQDIFNAVIKQNPFLVYD LKVIHWNSPKLRVNKHYPU FRRNLYLTELYDGNLLRRELF GCPSEADVNSENLCKQLSELDE DDLCYEFRREFTYHRTHLYFL LSDAEAQGFRYAQGSELDE DDLCYEFRREFTYHRTHLYFL LSDAEAQGFRYAQGSEVALLY KLSDAEAQGFRYAQGSEVALLY KLSDAEAQGFRYAQGSEVALLY KLSDAEAQGFRYAQGSEVALLY KLSDAEAQGFRYAGGSEVALLY KLSDAEAQGFRYAQGSEVALLY KLSDAEAQGFRYAQGSEVALLY KLSDAEAQGFRYAQGSEVALLY KLSDAEAQGFRYAQGSEVALLY KLSDAEAQGFRYAQGSEVALLY KLSDAEAQGFRYAQGSEVALLY KLSDAEAQGFRYAQGSEVALLY KLSDAEAQGFRYAQGSEVALLY KLSDAEAQGFRYAQGSEVALLY KLSDAEAQGFRYAQGSEVALLY KLSDAEAQGFRYAQGSEVALLY KLSDAEAQGFRYAQGSEVALLY KLSDAEAQGFRYAQGSEVALLY KLSDAEAQGFRYAQGSEVALLY KLSDAEAQGFRYAQGSEVALLY KLSDAEAQGFRYAQGSEVALLY KLSDAEAQGFRYAGGSEVALLY KLSDAEAGGFRYAGGSEVALLY KLSDAEAGGFRYAGGSEVALLY KLSDAEAGGFRYAGGSEVALLY KLSDAEAGGFRYAGGSEVALLY KLSDAEAGGFRYAGGSEVALLY KLSDAEAGGFRYAGGSEVALLY KLSDAEAGGFRYAGGSEVALLY KLSDAEAGGFRYAGGSEVALLY KLSDAEAGGFRYAGGSEVALTY KLSDAEAGGFRYAGGSEVALTY KLSDAEAGGFRYAGGSEVALTY KLSDAEAGGFRYAGGSEVALTY KLSDAEAGGFRYAGGSEVALTY KLSDAEAGGFRYAGGSEVALTY KLSDAEAGGFRYAGGSEVALTY KLSDAEAGGFRYAGGSEVALTY KLSDAEAGGFRYAGGSEVALTY KLSDAEAGGFRYAGGSEVALTY KLSDAEAGGFRYAGGSEVALTY KLSDAEAGGFRYAGGSEVALTY KLSDAEAGGFRYAGGSEVALTY KLSDAEAGGFRYAGGSEVALTY KLSDAEAGGFRYAGGSEVALTY KLSDAEAGGFRYAGGSEVALTY KLSDAEAGGFRYAGGSEVALTY KLSDAEAGGFRYAGGSEVATAGT KLSDAEAGGFRYAGGSEVATAGT KLSDAEAGGFRYAGGSEVATAGT KLSDAEAGGFRYAGGSEVATAGT KLSDAEAGGFRYAGGSEVATAGT KLSDAEAGGFRYAGGSEVATAGT KLSDAEAGGFRYAGGSEVATAGT KLSDAEAGGFRYAGGSEVATAGT KLSDAEAGGFRYAGGSEVATAGT KLSDAEAGGFRYAGGSEVATAGT KLSDAEAGGFRYAGGSEVATAGT KLSDAEAGGFRYAGGSEVATAGT KLSTATAGT KLSTATAGT KLSTATAGT KLSTATAGT KLSTATAGT KLSTATAGT KLSTATAGT KLSTATAGT KLSTATAGT KLSTATAGT KLSTATAGT KLSTATAGT KLSTATAGT KLSTATAGT KA |

| SEQ ID NO: | SEQ ID NO: of peptide sequence | Met hod | SEQ ID NO: in USSN 09/540,217 | Nucleotide location of first codon for peptide sequence | Nucleotide location of last codon for last amino acid of peptide sequence | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
|---------------|--------------------------------------|------------|-------------------------------------|--|---|---|
| 5471 | 35839 | | 5517 | l3 | 2079 | GKPVSLSPLESQAHSPRYTASS |
| 54 / 1 | 33839 | Α | 3317 | P | 2079 | ORERESLEVRMREVEEENRALI |
| | | | | | | ROLSLAOGRAPSHRRGNHSKT |
| | | l | | | | YSMEEGTGDSENLRAGIVAGN |
| | | | | | | SECGOOPVVEKCARRNPLHFHL |
| | | 1 | | | | ADSIAEQILATLFQTWMVPAVI |
| | | | | | | VDFYNADELKSEVSWIPNKHY |
| | | l | | | | GIYGLMKLVLTKTLPANLERV |
| | | 1 | | | | VLDTDITFATDIAELWAVFHKE |
| | | l | | | ŀ | KGOOVLGLVENOSDWYLGNL |
| | | l | | | | WKNHRPWPALGRGYNTGVILI |
| | | l | | 1 | | LLDKLRKMKWEQMWRLTAE |
| | 1 | 1 | | | | ELMGMLSTSLADODIFNAVIKO |
| | | 1 | | | | NPFLVYQLPCFWNVQLSDHTR |
| | | 1 | | | | EOCYRDVSDLKVIHWNSPKKL |
| | i | 1 | | | | RVKNKHVEFFRNLYLTFLEYD |
| | | l | | | | GNLLRRELFGCPSEADVNSENI |
| | 1 | | | | | QKQLSELDEDDLCYEFRRERFT |
| | | | | 1 | | VHRTHLYFLHYEYEPAADSTD |
| | | l | | | 1 | VTLVAQLSMDRLQMLEAICKE |
| | 1 | 1 | | 1 | ŀ | WEGPISLALYLSDAEAQQFLRY |
| İ | | | | | ŀ | AQGSEVLMSRHNVGYHIVYKI |
| | | l | | | | GQFYPVNLLRNVAMKHISTPY |
| | | l | | | | MFLSDIDFLPMYGLYEYLRKS' |
| | | ļ | | | i | IQLDLANTKKAMIVPAFETLRY |
| | | 1 | | | | RLSFPKSKAELLSMLDMGTLF |
| | | 1 | | | | FRYHVWTKGHAPTNFAKWRT |
| | | 1 | | | | ATTPYRVEWEADFEPYVVVRF |
| | | | | | | DCPEYDRRFVGFGWNKVAHIN |
| | | 1 | | | 1 | ELDVQEYEFIVLPNAYMIHMPI |
| | | 1 | | | | APSFDITKFR\$NKQYRICLKTLI |
| | | | | | | EEFQQDMSRRYGFAALKYLTA |
| 5472 | 35840 | Α | 5518 | 403 | 2757 | |
| 5473 | 35841 | В | 5519 | 128 | 353 | |
| 5474 | 35842 | A | 5520 | 2 | 333 | |
| 5475 | 35843 | В | 5521 | 25 | 1359 | |
| 5476 | 35844 | В | 5522 | 1 | 1113 | |
| 5477 | 35845 | A | 5523 | 1 | 2526 | |
| 5478 | 35846 | Α | 5524 | 3 | 555 | L |

649

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 5479 | 35847 | Α | 5525 | 1 | 1710 | MSQGTTPWGPTPAGTTPESEVE |
| | l | | | | | RPFPFPVPVPVPETSERSFPVRG |
| l | l | | | | | VCGQAKSGLRRGAARLAPAAY |
| | İ | l | | | | LFTRQQTRELIHSACVSISVNTN |
| | ŀ | l | | | | HGLSVAINSRRCTYYRKYVIDF |
| | l | i | | | | SKSEIIGIPISKNIDLTVGTTVTQ |
| | | | | | | LQNLNTVGIIGSRGGRGQVAAL |
| | ĺ | | | | | NCDRQGHLWLFTRVTVHWRM |
| | | l | | | | GNDRTFWGLLDTVSELMFIPGN |
| | | | | | | PKHHCGPPVKVGAYGVTFLGV |
| | | | | | | HWCGACQDTPCKMKDKLLHL |
| | | | | - | | APPTTKKKAQYVVGLLGFWRP |
| | | ŀ | | | | YRVTQKAASFEWGPEQDKALP |
| ŀ | | | | | | QVQAAVQPALLFGPYDSADPM |
| | | | | | | VLEASVADRDAVWSLWQAP/IS |
| | | l | | | ĺ | HKMGHAQQHSIIKWK*YICDW |
| | | l | | | | ARAGPKGTT\APMASWGVLYD |
| | ì | 1 | | | ĺ | QLTEEEKTRAWFTDGSARYAG |
| 1 | | l | | | 1 | TTQKWTAAALQPLSRTSLKGS |
| | | ı | | | | GEGKSSQWAELQAVHLVVHFS |
| | İ | 1 | | | | WKDKWPDVRLYIDSWAVANG |
| | 1 | 1 | | | | LAGWSGTWKKHDWKIGDKEI |
| | l . | 1 | | | | WGRGMWMDLSEWPKPVKIFG |
| | | l | | | | SHVSAHQWVISAEEDFNNQVD |
| | | ı | | | | KMTCSVDITQPLSPATPVITQW |
| | | 1 | | | | AHKQSGHGGRDGGYTWAQQH |
| | | | | | | GLPLTKTGLAMATAECPI |
| 5480 | 35848 | Α | 5526 | ! | 438 | |
| 5481 | 35849 | Λ | 5527 | 1 | 612 | EKOAMTAI COKI ICOOKATEAK |
| 5482 | 35850 | Α | 5528 | 2 | 736 | EKCAMTALSSKLISQQKAFFAK MVVDAVMMLDDLLQLKMIGI |
| | | l | | | | KKVQGGALEDSQLVAGVAFKK |
| | ŀ | l | | | | |
| | l | l | | | | TFSYAGFEMQPKKYHNPKIALL |
| | | l | | | l | NVELELKAEKDNAEIRVHTVEC |
| | | l | | | | YQAIVDAEWNILYD\KLEKIHH |
| | | l | | | | SGAKVVLSKLPIGDVATQYF\A |
| | | l | | | | DRDMFCAGRVPEEDLKRTMM |
| | 1 | l | | | | ACGGSIQTSVNALSADVLGRCQ |
| | | l | | | | VFEETQIGGERYNFFTGCPKAK TCTFILRGGAEQFMEETERSLH |
| | | | | | | DAIMIVRRA |
| 5483 | 35851 | A | 5529 | 3 | 474 | D. III. HUM |
| 5484 | 35852 | Α | 5530 | 374 | 968 | |
| 5485 | 35853 | Α | 5531 | 1 | 568 | |
| 5486 | 35854 | Α | 5532 | 1 | 2136 | |
| 5487 | 35855 | Α | 5533 | I | 240 | |
| 5488 | 35856 | Α | 5534 | 248 | 1034 | |
| 5489 | 35857 | Α | 5535 | I | 1602 | |
| 5490 | 35858 | Α | 5536 | 120 | 340 | |

| SEO ID | SEO ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|--------------|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| 1 | sequence | 1 | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | ł | |
| 5491 | 25050 | <u> </u> | 5537 | 2 | 1408 | DEDDDDDDEEDDDEDDDDDD |
| 3491 | 35859 | Α | 3337 | 12 | 408 | |
| | | | | l | | DDEEAEEKAPVKKSIRDTPA\K |
| | | | | 1 | l | NAQKSNQNGRDSKP\SSTPRSK |
| l | İ | | | | | GQESFKKQEKTPKTPK\GPSSVE |
| | 1 | | | 1 | l | DIKAKMQASIEKGGSLPKVEAK |
| 1 | | | | | | FINYVKDCF\RMTDQEAI\QDLW |
| | | | | L | | QWRKSL |
| 5492 | 35860 | Α | 5538 | 194 | 1027 | WSFISIHLLSYLSACHHLMEDS/ |
| | | | | 1 | | MDMGMRPLRPQNYLFSCELKA |
| | | | | | | NKDYHFK VDNNENEHQLPLTTI |
| | | | | | | NLGAGAMDELDIVEAEAMNYE |
| 1 | | | | | | GSPIKVILATLKMSVQPTVSLG |
| 1 | | | | | | G\FEITPPVV\LRLKCGSGPVHIS |
| | 1 | | | | ı | GOHLVAVEEDAESEDEEEEDV |
| | 1 | 1 | | | | KLLSISGKRSAPGGGSKVPOKK |
| İ | 1 | | | | | VKLAADEDDDDDDEEDDDED |
| | | | | | | DDDDDFDDEEAEEKAPVKKSIR |
| | 1 | | | | | |
| | 1 | | | | | DTPAKNAQKSNQNGKDSKPSS |
| | | | | | | TPRSKGQESFKKQQKTPKTPKG |
| | | _ | | <u></u> | | PSSVEDIKAKMQASIEKAH |
| 5493 | 35861 | C | 5539 | 212 | 367 | |
| 5494 | 35862 | Α | 5540 | 14 | 1515 | |
| 5495 | 35863 | Α | 5541 | 1 | 540 | |
| 5496 | 35864 | Α | 5542 | 1 | 1881 | MDAALDDLIDTLGGPEETEEEN |
| | 1 | | | | | TTYTGPEVSDPMSSTYIEELGK |
| ł | 1 | 1 | , | | | REVTIPPKYRELLAKPIGPDDAI |
| 1 | | | | | | DALSSDFTCGSP*LYPSQVFHLL |
| | 1 | | | | | DLLPFSPGYQPRLLQHHLA/AVP |
| | | | | | | FKVAGSGGADCILHMEVRDTA |
| 1 | | | | | | SDTGAGAAALDSSVFSVGLDGF |
| | | | | | | SLHSDRSKSSESSSMSSDSLRGL |
| | | | | | | GFSSGSGNSGFPSLSVAGFNLYS |
| 1 | | | | | | DGIVSSSSPHFSSFSSLAFASSTS |
| 1 | 1 | | | | | LIERRSSSGSACRVPSEADRASS |
| 5497 | 35865 | Α | 5543 | 1 | 930 | |
| 5498 | 35866 | Α | 5544 | 1 | 183 | |
| 5499 | 35867 | A | 5545 | i i | 555 | |
| 5500 | 35868 | A | 5546 | 162 | 499 | FPGSGNMAKDAGLIEANGELK |
| 1 | 1 | 1 | | 1 | 1 | VFIDQNLSPGKGVVSLVAVHPS |
| | | | | 1 | I | TVNPLGKOLLPKTFGOSNVNIA |
| | | | | | 1 | QQVVIGTPQRPAASNTL/VWVG |
| 1 | 1 | | 1 | | i | SPHTPSTHFASQ\NQPSDSSPW\S |
| | | 1 | 1 | 1 | İ | |
| | 05050 | | 55.47 | - | 461 | AGKR |
| 550I | 35869 | Α | 5547 | 2 | 451 | LVAEFSAADNHILPNESAYDQK |
| | | 1 | 1 | 1 | I | NIRRRVYDALNVLMAMNIISKE |
| 1 | 1 | 1 | 1 | 1 | I | KKEIKWIGI.PTNSAQECQNLEV |
| | | 1 | | 1 | 1 | ERQRRLERIKQKQSQLQELILQ |
| 1 | 1 | | l | 1 | 1 | QIAFKNLVQRNR\HAEQQASRP |
| | | 1 | 1 | | | PPPNSVIHLPFIIVNTSKKTVIDC |
| | | 1 | 1 | | 1 | SISNDKFEYLFNFDNT |
| 5502 | 35870 | Α | 5548 | 37 | 162 | |
| | | _ | | | | |

| SEO ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------------------|----------|-----------------------|--|--|--|
| NO: | of peptide sequence | hod | in USSN 09/540,217 | location of first codon for peptide | codon for last amino acid of peptide sequence | *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 5503 | 35871 | A | 5549 | 205 | 616 | RKLHGSQSSITIAVFGKQNTYIR LEPFKINVLEQITKHIEKLQCGG VVKQLSRRGNNQHISSTYDINR ADAQVRRAVNNYDIIVMSNSF NGQSEHQVWIGGQFTFIKF\PIN |
| | | | | | | SVSIRCRARQEGIMSSPGQQVG |
| 5504 | 35872 | В | 5550 | I | 1407 | |
| 5505 | 35873 | A | 5551 | 3 | 416 | MLPARMCCGIVSG*QFHTGNSY DHDYEFELGTRS*A*LKLLFS*T LPP*QLPAGSGEGPYHL.FGQLS YCHRGGEKALAALLSSPTSKTR SPSEPDPEQDEQKLRFCKRHLY GQQPRSPVEIRLQHVAIAYQTH HAYD |
| 5506 | 35874 | A | 5552 | 1988 | 2137 | LVITTLLPLACGTAK*E*VNVTS FGSRPICSTSPVLFSGL*GPVKEF DT |
| 5507 | 35875 | В | 5553 | 1 | 561 | Di |
| 5508 | 35876 | A | 5554 | 1 | 492 | |
| 5509 | 35877 | A | 5555 | 3 | 1055 | |
| 5510 | 35878 | Ā | 5556 | 1 | 634 | |
| 5511 | 35879 | Ā | 5557 | i | 723 | |
| 5512 | 35880 | A | 5558 | ī | 384 | |
| 5513 | 35881 | Α | 5559 | 1 | 792 | |
| 5514 | 35882 | A | 5560 | 3 | 1607 | HCTRMSVKWTSVILLIQLSFCFS SGNCGKVLVWAGYSHWMIN KTILDELIQRGHEVTVLASSASI LFDPNNSSALKIEIYPTSI.TKTE ENFIMOQIKEWSDLFREDTFWILY FSQVQEIMSIFGDITRKFCKDVV SNKKRMKKVQESRFDVIFADAI FFCSELLAEI.FNIFFVYSLSFSRG YTFEKHSGGFIFPRSVYDVVMSE LTDQMTFMERVKNIMYVL.YFD FWFEIFDMKKWDQFYSEVLGR PTILSETMGKADVWLIRNSWN FOFPIPILLFNVDFVGGLICKPA KPLPKEMEDFVQSSGRGVVV FSLGSMVSNMTEERANVIASAL AQIPQKVLWRFDGDUKPDTLGL NTRLYKWIPQNIDLLGHPKTRA THIGGANGIYEAIYHGIPMVGI PLFADQPDNIAHMKARGAAVR OFFTMSTDLJAALKRVINDP SYKENYMKLSRIOHDOPVKPI. DRAVFWIEFVMRHKGAKHLRV NAHDLTWFQYHSLDVIGFLLV CNATVIFIVTKCCLFCFWKFAR KAKKGKND |
| 5515 | 35883 | A | 5561 | 2 | 1600 | ICHCCCCIO |
| | 1-2002 | <u> </u> | 1-20. | | 1 | |

| Sequence 09/540/217 codon for peptide of peptide sequence deletion, ly-possil | possible mucleotide ble nucleotide insertion) HCIRMSMKWTSAL SSGSCGKVLVWPT TTILDELVQRGHEV SFDPNSPSTLKFEV FEDIIKQLVKRWA SYFSQVQEIMWTFN IVSNKKLMKKLQE DAVFPFGELLAELL FSPGYAIEKHSGGL VMSELSDQMTFIE |
|--|---|
| Sequence 09/540/217 codon for peptide of peptide sequence deletion, ly-possil | HCIRMSMKWTSAL SSGSCGKVLVWPT CTILDELVQRGHEV SFDPNSPSTLKFEV FEDIKQLVKRWA SYFSQVQEIMWTFN IVSNKKLMKKLQE AVFPFGELLAELL VMSELSDQMTFIE |
| 5516 35884 A 5562 2 1624 AATGKQAL LLIQI.SCYFS EFSHWMMIN TVILASSASIS YPVSLTKTE ELPKDIFIWS DILRKFCKD SRFDVVLAI KIFFVYRR LFPPSYVPV RVKMMIYV KWDGYSS KADIWLIKN | SGSCGKVLVWPT KTILDELVQRGHEV SFDPNSPSTLKFEV FEDIIKQLVKRWA SYFSQVQEIMWFFN IVSNKKLMKKLQE DAVFPFGELLAELL FSPGYAIEKHSGGL VMSELSDQMTFIE |
| LLIQLSCYFS EFSHWMMII TVLASSASIS YPVSLTKTE ELFKDITE ELFKDITE SRFDVVLAT KIPFVYRPRI LFPPSYVPV RVKMMIYV KWDGYSE KADIWLIKN | SGSCGKVLVWPT KTILDELVQRGHEV SFDPNSPSTLKFEV FEDIIKQLVKRWA SYFSQVQEIMWFFN IVSNKKLMKKLQE DAVFPFGELLAELL FSPGYAIEKHSGGL VMSELSDQMTFIE |
| LLIQLSCYFS EFSHWMMII TVLASSASIS YPVSLTKTE ELFKDITE ELFKDITE SRFDVVLAT KIPFVYRPRI LFPPSYVPV RVKMMIYV KWDGYSE KADIWLIKN | SGSCGKVLVWPT KTILDELVQRGHEV SFDPNSPSTLKFEV FEDIIKQLVKRWA SYFSQVQEIMWFFN IVSNKKLMKKLQE DAVFPFGELLAELL FSPGYAIEKHSGGL VMSELSDQMTFIE |
| EFSHWMIII TVLASSASI YPVSLTKTE ELPKDITFW DIL RKFCKD SRFDVVLAI KIFFYSTRI LFPFSSYPV RVKNMIYV KWDGYSE KADIWLIKN | KTILDELVQRGHEV SFDPNSPSTLKFEV FEDIIKQLVKRWA SYFSQVQEIMWTFN IVSNKKLMKKLQE DAVFPFGELLAELL FSPGYAIEKHSGGL VMSELSDQMTFIE |
| TVLASSASIS YPVSLTKTE ELPKDIFW DILRKFCKD SRFDVVLAT KIPPYYRRI LFPPSYVPV RVKNMIYVI K WDQFYSE KADIWLIRN | SFDPNSPSTLKFEV FEDIIKQLVKRWA SYFSQVQEIMWTFN IVSNKKLMKKLQE DAVFPFGELLAELL FSPGYAIEKHSGGL VMSELSDQMTFIE |
| YPVSLTKTE ELFKDITE BLFKDITE DILRKFCKD SRFDVVLAT KIPFVYRPRI LFPPSYVPV RVKMMIYV) KWDGYSE KADIWLIKN | FEDIIKQLVKRWA SYFSQVQEIMWTFN IVSNKKLMKKLQE DAVFPFGELLAELL FSPGYAIEKHSGGL VMSELSDQMTFIE |
| ELRADIFW DILRKFCKD SRFDVYLAI KIPFYYRRI LFPFSYPFV RVKNMIYV) KWDQFYSE KADIWLIKN | SYFSQVQEIMWTFN IVSNKKLMKKLQE DAVFPFGELLAELL FSPGYAIEKHSGGL VMSELSDQMTFIE |
| DILRKFCKD SRFDVVLAR KIPPYYRPR LFPPSYVPV RVKNMIYVI KWDQFYSE KADIWLIRN | IVSNKKLMKKLQE DAVFPFGELLAELL FSPGYAIEKHSGGL VMSELSDQMTFIE |
| SRFDVVLAI KIPFVSVPV RVKMMIYV) KWDGYSE KADIWLIKN | DAVFPFGELLAELL FSPGYAIEKHSGGL VMSELSDQMTFIE |
| KIPFVYRPRI LFPPSYVPV RVKNMIYVI KWDQFYSE KADIWLIRN | FSPGYAIEKHSGGL VMSELSDQMTFIE |
| LFPPSYVPV RVKNMIYVI KWDQFYSE KADIWLIRN | VMSELSDQMTFIE |
| RVKNMIYVI K WDQFYSE KADIWLIRN | |
| KWDQFYSE KADIWLIRN | |
| KADIWLIRN | |
| | |
| | |
| | CKPAKPLPKEME\E |
| | SVVVFSLGSMVSNT |
| | SALAKIPQKVLWR |
| | GLNTRLYKWIPQ |
| | RAFITHGGANGIY |
| | VGVPLLADQPDNI |
| | AVSLDFHTMSSTD |
| | NDPLYKENAMKLS |
| | PLDRAVFWIEFVM |
| | RVAAHDLTWFQY |
| | LACVATVIFIITKC |
| LFCVWKFV | RTGKKGKRD |
| 5518 35886 A 5564 II 3210 | |
| 5519 35887 A 5565 I 835 | |
| | ILKYLTKKYLKKN |
| NLRDWLRV | VANSKESYELRYF |
| OINODEEEE | EDED*ISFIWKILYE |
| | KKKKTKKKKK |
| 5521 35889 A 5567 II 778 MAAAAAA | GDSDSWDADAFS |
| | GGGTAGGDRWG |
| | KDNWDDDDDEKK |
| | KISEKKKIAEKIKE |
| | QEEIKKRLEEPEEP |
| | ADKLRLKKLOEES |
| | GVNNAVYGIDAM |
| | EFGKLLKDI\ITQYE |
| | EVLVRDVCISLEID |
| | TVLCSEKOKOEKO |
| | GVVPGGGLKATM |
| | GYDGGYVODYED |
| 5522 35890 A 5568 I 897 | |
| 5523 35891 A 5569 1 2658 | |
| 5524 35892 A 5570 1 441 | |
| 5525 35893 A 557I 3 427 | |

| SEO ID NO: | Met | SEO ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X-Unknown, |
|------------|---|---------------------|---|---|--|
| of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | sequence | | |
| 25904 | 1 | 5572 | 11 | 1052 | PRLVLLKMAPLDLDKYVEIARI. |
| 33894 | l ^A | 3372 | ' | 932 | CKYLPENDLKRLCDYVCDLLL |
| | l | | | | EESNVOPVSTPVTVCGDIHGOF |
| | 1 | | | | YDLCELFRTGGQVPDTNYIFMG |
| | | | | | DFVDRGYYSLETFTYLLALKAK |
| | | | | | WPDRITLLRGNHESRQITOVYG |
| | | | | | |
| | | | | | F\YDDCLTKYG\NANAWRYCTK |
| | | | | 1 | VFDMLTVAALIDEQILCVHGGL |
| | 1 | | | | SPDIKTL\D\QIRTIERNQEIPHKG |
| | | | | | AF\CDL\VWS\DPEDVDT\WAI\S |
| | | | | | PRGAGWLFGAK\VTN\EFGS*ST |
| | | | | | NLKLICRAHQLVHEGYKFMFD |
| | | | | | EKLVTVWSAPNYCYRCGNIASI |
| | | | | | MVFKDVNTREPKLFRAVPDSE |
| | | | | | RVIPPRTTTPYFL |
| | _ | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| 35899 | Α | 5577 | 1 | 841 | ILLWDVDGGLTQIDKYLYSSED |
| | l | | | | YIKSGALLACGIVNSGVRNECD |
| | ł | | | | PALALLSDYVLHNSNTMRLGSI |
| | ŀ | | | | FGLGLAYAGSNREDVLTLLLPV |
| | l | | | | MGDSKSSMEVAGVTALACGMI |
| | | | | | AVGSCNGDVTSTILQTIMEKSE |
| | ŀ | | | | TELKDTYARWLPLGLGLNHLG |
| | | | | | KGEAIEAILAALEVVSEPFRSFA |
| | 1 | | | l | NTLVDVCAYAGSGNVLKVQQL |
| | l l | | | | LHICSEHFD\SKEKEEDKDKKEK |
| | 1 | | | | KDKDKKEAPADMGAHQGVAV |
| | l | | | | LGIALIAMGEEIGAEMALRTFG |
| | 1 | | | | HLLRYGEPTLRRAVPLALAL |
| 35900 | Α | 5578 | 2 | 391 | AFGVTEPGCYGVIDVDTGKSTL |
| | 1 | ĺ | | | FVPRLPASHATWMGKL/HSVLT |
| | | | | | SOKPSVLLTLRGVNTDSGSVCR |
| | | | | | EASFDGISKFEVNNTILHPEIVE |
| | | | 1 | | CRVFKTDMELEVLRYTNKISSE |
| | 1 | | | | AHREVMKAVKVGMKEYELER |
| | 35894 35894 35895 35896 35897 35898 35899 | of peptide sequence | of peptide hod in USNs 99/540,217 35894 A 5572 35895 A 5573 35896 A 5574 35897 A 5575 35898 A 5576 35899 A 5577 | 9/540,217 codon for peptide sequence 9/540,217 codon for peptide sequence 35894 | |

| | | | | Territoria de la companya della companya della companya de la companya della comp | | |
|---------------|------------------------|-----|------------|--|---------------------|---|
| SEQ ID NO: | | Met | SEQ ID NO: | Nucleotide location of first | | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide |
| NO: | of peptide sequence | noa | 09/540.217 | eodon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | sequence | | 09/340,217 | scauence | or peptide sequence | deterion, v-possione aucreouge insertion) |
| | | | | | | |
| 5533 | 35901 | Α | 5579 | 18 | 1541 | RRCRANMAAATGPSFWLGNET |
| | | | | | | LKVPLALFALNRQRLCERLRKN |
| | | | | | | PAVQAGSIVVLQGGEETQRYCT |
| | | | | | l | DTGVLFRQESFFHWAFGVTEPG |
| | 1 | | i | l | | CYGVIDVDTGKSTLFVPRLPAS |
| 1 | | | | l | | HATWMGKIHSKEHFKEKYAVD |
| | 1 | 1 | | | | DVQYVDEIASVLTSQKPSVLLT |
| | | | | l | | LRGVNTDSGSVCREASFDGISK |
| | ł | | | l | | FEVNNTILHPEIVECRVFKT\DM |
| | | | | | | EL\EVLRYTNKISS\EAHREV\MK |
| | | | | l | | AVKSGEWKEYGVGKASFEHY\ |
| | | l | | İ | | CYSRG\GMRH\TSYT\CILRAVG |
| | | | | | | *GTSAVLTFTGH\AGAPNDRTIQ |
| | | | | | ł | NGDMCLFDMGGEYYSVASDIT |
| | | | | | | CSFPRNGKFTADQ\KAVYEAVL |
| ŀ | 1 | | | | | LSSRAVMGAMKPGDWWPDM\ |
| | | 1 | | | | HRLAYRIHLEELAHMGILSGSV |
| | | | | | | DAMVQAHLGAVFMPHGLGHF |
| | | | | | | LGIDVHDVGGYPEGVERIDEPG |
| | | | | | | LRSLRTARHLQPGMVLTVEPGI |
| l | | l | | | | YFIDHLLDEALADPARASFLNR |
| 1 | | | | 1 | 1 | EVLQRFRGFGGVRIEEDVVVID |
| l | | | | l | | SGIELLTCVPRTVEEIEACMAGC |
| | | | | | | DKAFTPFSGPK |
| 5534 | 35902 | A | 5580 | 1 | 98 | |
| 5535 | 35903 | A | 5581 | 1 | 810 | |

| SEQ ID | SEO ID NO- | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown. |
|--------|------------|------|------------|---|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | - | ŀ | | sequence | | · · |
| | <u> </u> | | | L | | |
| 5536 | 35904 | A | 5582 | 1 | 861 | MLKEIIDDTNKWKHIPCSWMG |
| | | 1 | | | | RISIVKMTILPKAIYKFNAVLIKI |
| 1 | | l | | | ŀ | PPSFFTELEKTILKFLCNEKRAS |
| ŀ | | 1 | | | | RAKARLNKKNKSGGITLLDFKR |
| 1 | | | | | | YYSAIVTKTVWYWYKNRHIHQ |
| ł | | 1 | | | | RNRIENPEINPNTYSQLIFNKAN |
| 1 | | l | | | | KNIKWGNDTLFSKWCWDNWL |
| l | | | | | | ATCRRMKLDPHLSPHTKINSRW |
| | | | | | | IKDLILRPETTKILEDNIGKTLLD |
| 1 | | | | | | VGLGKDFMTKNPKANARKAKI |
| | | | | | | NIWDLIKLKSFFTAKGTVSRVN |
| | | | | | | ROPTEWEKIFIIHTSDEGLLISRI |
| | | 1 | | | | YNELKQISKKK\TNNPIKKWAK |
| ļ. | | | | | | DMNROFSKEDVOMANKYMKK |
| | | ĺ | | | | CSTSLIANLICREMOIKTTMOY |
| | | | | | | HLTPARMAIIKKSKISRCWHGC |
| | | l | | | | GDQGTLLHCWWECKLVQPLW |
| | | l | | | | KTVWRFLKELKVELPFDPAIPL |
| İ | | | | | | LGTHPEEKKSLCKKDTCTCMLL |
| | | 1 | | | | AAQFTIAKSWNQPKCPSVNEWI |
| | | | | | | KKLCPRWLLSKWASA*NKWK |
| 1 | | l | | | | HIPCSWMGRISIVKMTILPKAIY |
| | | 1 | | | | KFNAVLIKIPPSFFTELEKTILKF |
| | | 1 | | | | |
| | | | | | | LCNEKRASRAKARLNKKNKSG |
| | | | | | | GITLLDFKRYYSAIVTKTVWY |
| ļ | | 1 | | | | WYKNRHIHQRNRIENPEINPNT |
| | | | | | | YSQLIFNKANKNIKWGNDTLFS |
| | | 1 | | | | KWCWDNWLATCRRMKLDPHL |
| 1 | | | | | | SPHTKINSRWIKDLILRPETTKIL |
| | | 1 | | | | EDNIGKTLLDVGLGKDFMTKN |
| | | 1 | | | | PKANARKAKINIWDLIKLKSFF |
| | | 1 | | | | TAKGTVSRVNRQPTEWEKIFIIH |
| 5537 | 35905 | В | 5583 | 473 | 1694 | |
| 5538 | 35906 | Α | 5584 | I | 429 | |
| 5539 | 35907 | Α | 5585 | 572 | 1149 | PPVSHSMTLGNSYLFAPNWTIT |
| | | | | | Į. | PAW/CNTLDPSEGFGWQASLSL |
| | | l | ł | | 1 | PSHQQFEHTCPEWLPTYSWPCK |
| | | | | | | VGPDYLSEICQPECKQHFQESL |
| | | 1 | | | | TESSKONIYETCAIYVSSPGERIL |
| | ľ | l | | | | NORFGPHGAFILVREYDDIRFS |
| | | l | | | | HSGPPSTCPNFPGPSYYTARESA |
| | | | | | ľ | YALKLRALEIIQISQSTKMQRNL |
| | | 1 | | | | GNPILPAIHOOPPO |
| 5540 | 35908 | A | 5586 | 1 | 804 | 3.1.12.11.144.14 |
| 554I | 35909 | В | 5587 | 1 | 1995 | |
| 2341 | 33709 | In . | 3301 | l <u>' </u> | 1773 | |

| SEO ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | eodon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 5542 | 35910 | Α | 5588 | 174 | 1128 | LLLDL*VD*SPSRPLEMRFRV*P |
| | | | | 1 | | MKRCTTLKKNYLSFLVYISRNI. |
| | | | | 1 | İ | *NRVKAIM/VGKAEWKTIELPL |
| | | l | | | | PRKTVNOKOYRIPGGIAEIST II |
| | | | | l | | KELNNAGMVIPTTSPFNSPIWP |
| | | 1 | | l | | VOKIDGSWRMTVDYCKLNOV |
| | İ | | | | | VTPIAATVPYVVSSLEQIN/TSPC |
| | | | | | | T/WNRKRFCNRSRLLHKLLCHL |
| ļ | | l | | | | GHMTQQI*CFLRCQWHIGMLF |
| | | | | | | GPEICGCTSLSGQKL/WKIFVSH |
| | | l | | | | AASFEWSPEQEKALQQVQAVV |
| | | | | | 1 | QAALPLGPYDPADPVLLEMSV |
| 1 | | 1 | | | | ADRDAVWILWQAPISESQWRPI |
| | | | | l | | GFWSKALPSSADNYSPFERQLL |
| | | i | | l | ł | ACYWTLVETERLTMGHQVTIPF |
| 1 | | ı | | | | ELPIMNWVFSDLSSPKMCHPQQ |
| 5543 | 35911 | Α | 5589 | 1 | 1337 | MIISIDAEKAFDKIQQPFMLKTL |
| | | l | | | | SKLEETASPSPVVATYTPQPML |
| | i | l | | l | 1 | PSAFPPLSEEINPVLPETTVMAS |
| | | 1 | | | ł | PEAVTRQDNVDSPQKPPPTPMF |
| | | | | | | ASRPITRLKPRRAPSEEGIQRLK |
| | | | | | ŀ | KIGMVEWISHFRPTPLSMEGPE |
| | | l | | | | HILLTNTLLNRYVKAAPASLKS |
| | | | | | | PLTALLFMSDLTVGTTFSQLQN |
| | | 1 | | | İ | LNTMGIFGSSCDRSQVAALNHQ |
| | | l | | | | RQVPECKIVIDILNIWRIPHIGSL |
| | | | | | | TGRVREIMVGKAKWKPLEQPP |
| | | | | | ľ | PRKIVIQKQYHIPGAITEISATIE |
| | | | | | ļ | DLKETGVVILTTSPFKSSIWPLQ |
| | | | | | | KTDGSWRMTVNYHKLNQVET |
| | | 1 | | | ł | PIAAAVPDVVSLLEQINTSPGT |
| | | l | | | | WYAAIDLVNVFFSIPVYKAHQK |
| | | | | | 1 | QFAFSWQGQQYTFTFLPQGYIN |
| | | | | l | 1 | SPDITLVHYIDDIMLIGSSEQEV |
| | | | | | | ANTLDLLPARVASWGVPYDQL |
| | | _ | | | | T/GGRED*GLLHRWSCRICRHH |
| 5544 | 35912 | Α | 5590 | 2 | 693 | KIVN/QKQYHIRGGIAEISATIKD |
| | | 1 | | l | | SKDTGVVIPTTSPFNSPIWPVW |
| | | | | | | KTDGSWTITVDYHKLDQVVTPI |
| İ | | l | | | | AAAVPDVVSLLEQINTSPGTWY |
| | | | 1 | 1 | | AAINLENAFFSIPVHKANQ/KQF |
| | | l | | | | AFSWQGQQYTIAVLPQ\VKFLG |
| | | 1 | l | 1 | | IHWFVACQDIPSKIKDKLLHLA |
| 1 | | 1 | | | | PPTNKKEAQCLVGLFGFWRQHI |
| | | | l | l | | PHLRVLLQPIYQVTLKAAIFEW |
| | 1 | | | [| | GPEQEKALQQVQAAVQAALPL |
| | | | | | L | GPYDPTDPMVLE |

| SEQ ID | | | SEQ ID NO: | | | Amino acid sequence (X-Unknown, |
|--------------|----------------|--------|--------------|-------------------------------|---------------------------|--|
| NO: | of peptide | hođ | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, :=possible nucleotide insertion) |
| | | ľ | | sequence | | |
| 5545 | 35913 | Α | 5591 | 1 | 1011 | MVSTPATLPSLPKPALMASWG |
| | | | | | | VPYDQLTKEEKTRVWFTDGSA |
| | | | | l | | RYAGTTQKWTAVALQPLSRTS |
| | | ŀ | | l | | LKDSSEGKSSQWAELQAVYLV |
| | | ŀ | | | | VHFAWKEKWPDVGLYTDSWA |
| | | ŀ | | | | VANGLAGWSETWEKQDWKIG |
| | | | | | | DKEIWGRGMWMDLSEWSKAV |
| | | 1 | | l | | KIFVSHVSAHQRVTSAEEEFNN |
| | | | | | | QVDRPL/PVFTQWAHEQSGHSG |
| | | 1 | | l | | RDGGYSWAQQT\GLPFTKADL |
| | | l | 1 | | | AMATAECPICQQRPTLSPLYS |
| | | | | | | TIPQGDQPATWWQIDYIGPLPS |
| | | 1 | | | | WKGQKFVLTVIDTYSRYRFAY |
| | | 1 | | | | PAHNASAKTTIHGLIECLIHCYG |
| | | | | I | | IPHSIASDQSIHF/TTKEVQ*WAH |
| | | | | | | AHGIHWSYHVSHHPEAAGL |
| 5546 | 35914 | A | 5592 | 7 | 278 | SASCTAAFHHQMEVVYTRSGS |
| | | 1 | | 1 | | SRS*R\PTIPVIAQWDYDHNGHG |
| | | | | | | GRDGGYPWAQQHELPLTKADL |
| | | | | | | ATATAECPICQQQRPSLSPRCGT |
| | | | | | | IPR |
| 5547 5548 | 35915 35916 | A | 5593 5594 | 63 | 237 | |
| 5549 | 35917 | A | 5595 | 2 | 739 | HKMGHAQQHSIIKWK*YICDW |
| 3349 | 33917 | ^ | 3393 | 12 | 139 | ARAGPKGTT\APMASWGVLYD |
| | | | | | | QLTEEEKTRAWFTDGSARYAG |
| 1 | | | | | | TTOKWTAAALOPLSRTSLKGS |
| l | | | | 1 | | GEGKSSQWAELQAVHLVVHFS |
| | | | | | | WKDKWPDVRLYIDSWAVANG |
| | | | | | | LAGWSGTWKKHDWKIGDKEI |
| | | 1 | | | | WGRGMWMDLSEWPKPVKIFG |
| | | | | | | SHVSAHQWVISAEEDFNNQVD |
| 1 | | 1 | | | | KMTCSVDITQPLSPATPVITQW |
| | | | | | | AHKOSGHGGRDGGYTWAOOH |
| ĺ | | | | | | GLPLTKTGLAMATAECPI |
| 5550 | 35918 | Α | 5596 | 1 | 354 | |
| 5551 | 35919 | Α | 5597 | 3 | 592 | |
| 5552 | 35920 | A | 5598 | 126 | 365 | QLAEPPHWLPD*KGAGFEWGP |
| | | | | | | EQKKALQ*VQAAVQAALPLGP |
| l | | | | l | | YDPADPMVLVVSVADKDAVWI |
| | | _ | | | | FHLSGSDRWRRTYRCL |
| 5553 | 35921 | A | 5599 | 1 | 483 | |
| 5554 5555 | 35922 35923 | A B | 5600 | 141 | 1908 | |
| 5556 | 35923 | В | 5602 | 46 | 1533 | |
| 5557 | 35924 | A | 5603 | 61 | 448 | WRFLGPWRIVSCWFCGWEERR |
| 5551 | 33323 | l^ | 15505 | ľ. | 1 | EGSAFFVGIPARMSAARESHPH |
| | | | | 1 | | GVKRSASPDDDLGSSNWEAAY |
| | | | | 1 | | LGNEERKOKFLRLMGA/GKGEE |
| | | | | 1 | 1 | DOKINEELESOYOHSMDSKLSG |
| | | | | | | RYRRHCGLGFSEVEDHDGEGD |
| | | | | | | RYRRHCGLGFSEVEDHDGE |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------------------|---------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 5558 | 35926 | A | 5604 | 1 | 404 | PWRIVSCWFCGWEERREGSAFF |
| | | 1 | | | | VGIPARMSAARESHPHGVKRSA |
| | | 1 | 1 | l | | SPDDDLGSSNWEAADLGNEER |
| | | l | | | | KOKFLRLMGAGKKEHTGRLVI |
| | | l | | l | | GDHKSTSHFRTG\EDHDGEGDV |
| | | | | l | | AGDDDDDDDDDDPP*SPDDSES |
| | | 1 | | | | DSESE |
| 5559 | 35927 | A | 5605 | 2 | 434 | LGPWRIVSCWFCGWEERREGS |
| | | | | | | AFFVGIPARMSAARESHPHGVK |
| | | 1 | | | | RSASPDDDFFLFAIMNGK*KIV |
| | | | | | | NSHRCSVKAKSROOLGSSNWE |
| | | | | | | AADLGNEERKOKFLRLMGAGK |
| | | 1 | | | | KEHTGRLVIGDHKSTSHFRTGE |
| | l . | ı | İ | | | ED*KINEELESQYOH |
| 5560 | 35928 | c | 5606 | 909 | 1096 | |
| 5561 | 35929 | A | 5607 | 1 | 309 | PQPAAMAAYIWVLIRHGESAW |
| | | 1 | | | 1 | NLETSFSGWYDATLSLAGHKE |
| | | 1 | | | | AKRGGQALRGLFQVPLAPEAV |
| | 1 | 1 | | | | GTVWCSWRTPCALKQL*PRPL |
| | 1 | 1 | | | | KRRLRILADRHATOPRPOO |
| 5562 | 35930 | Α | 5608 | 93 | 914 | SQSVPHPQPAAMAAYK\LVLG\ |
| | | | | | | RHGESAWNLENRFSGWDDADL |
| | l . | l | | | | SPAGQRGGERFAAQALQDAGY |
| | | 1 | | i | | EFDICFTSV\QKRAIRTLW\TVL\ |
| | l | 1 | | | | DAFDQMWLASGEGLWGFNER |
| | 1 | 1 | | | | HYWGS*PGLN*KQKLAAKIG*G |
| | | | | | | PRLKI\WRRSY\D\VPPPPMEPDH |
| | | | | | | PFYSNISKDRRYADLTEDQLPS |
| | | ı | | | 1 | C\ESLKDTIARALPFWNEEIVPQI |
| | 1 | | | | | KEGKRVLIAAHGNSLRGIVKHL |
| | 1 | | | | | EGLSEEAIMELNLPTGIPIVYEL |
| | | 1 | | | | DKNLKPIKPMQFLGDEETVRKA |
| | 1 | | | | | MEAVAAQGKAKK |
| 5563 | 35931 | Α | 5609 | 2 | 450 | VNKAGGLIYQLDSYAP/RAEAE |
| | 1 | ı | | | | KTFSYPLDLLLKLHDERVLVAF |
| | | | | | | GQRDGIRVGHAVLAINGMDVN |
| | | | | | 1 | GRYTADGKEVLEYLGNPANYP |
| | 1 | 1 | l | I | I | VSIRFGRPRLTSNEKLMLASMF |
| | | ĺ | | I | l | HS\IKFVVLADP\RQAGIDSLLRK |
| | 1 | | 1 | | | IYEIYSDFALKNPFYSLEMP |
| 5564 | 35932 | A | 5610 | 1 | 663 | |
| 5565 | 35933 | A | 5611 | 1 | 2034 | |
| -505 | 1-0/00 | ۲٠_ | 1 | I | I | L |

| SEO ID | SEO ID NO: | Met | SEO ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | 1 | | sequence | | |
| 5566 | 35934 | IA | 5612 | 374 | 1106 | IPVSERQGSDWRFFSVYVVNKA |
| | | | | Ī | | GGLIYQLDSYAPTGLRLEKTF\S |
| | | | | | | YPLDLAGSS*HDERVLVAFGOR |
| | 1 | 1 | | | | GRHPEWGHAVL\AINGM\DVNG |
| ļ | | | | | | RYTADG\KEVLEYLG*PLLNYP |
| ŀ | | | ĺ | | | VSIRF\GRPRL\TSNE\KLMLGLP |
| | l | 1 | | | | CFHSLFAIG\SQACLPGTREASR |
| | | | | | | HLKILGRODTFK\LH\CYOTLT\G |
| | Į. | 1 | | | | IKFVVL\ADPR\QAGI\DSLLRKI |
| | | 1 | | | | YEVIY\SDFALKNP\F\YSLEMPIR |
| ļ | | | | | | CELFDONLKLALEVAEKAGTF |
| 5567 | 35935 | A | 5613 | 1 | 336 | |
| 5568 | 35936 | В | 5614 | 60 | 2175 | |
| 5569 | 35937 | Α | 5615 | 2 | 198 | |
| 5570 | 35938 | Α | 5616 | I | 449 | |
| 5571 | 35939 | Α | 5617 | I | 771 | |
| 5572 | 35940 | Α | 5618 | 18 | 736 | EAMSSKVSRDTLYEAVREVLH |
| | | | | | | GNQRKRRKFLETVELQISLKNY |
| | | | | | | DPQKDKRFSGT/VQVGTVLIPPS |
| 1 | 1 | | | | | PQCPRACPSPAGSR*AGGGHVG |
| | | | | | | TDVLG*FRPPAPGRRGWTDPHP |
| | | | | | | GS*NMRGGVGRPRPSPPASLRS |
| | 1 | 1 | | | | QAGCW*M*TLRVRLGWLLRSQ |
| | ì | | | | | TLHRALGTPGLGVTCWCCPPK |
| | | | | | | RRLKSTPRPKFSVCVLGDQQHC |
| | | | | | | DEAKAVDIPHMDIEALKKLNK |
| | | | | | | NKKLVKKLAKKYDAFLASESLI |
| 5573 | 35941 | Α | 5619 | 24 | 698 | EAMSSKVSRDTLYDAVREVLH |
| | | | | | | GNQRKRRKFLETVELQISLKNY |
| | | | | Į. | | DPQKDKRFSGTVRLKSTPRPKF |
| | l | | | | | SVCVLGDQQHCDEAKAVDIPH |
| | | | | | | MDIEALKKLNKNKKTGSRSWP |
| | | | | | | KKYDAFLA/SQSPLIQADSPKSL |
| | 1 | l | | | | GP\SLNKGRKSSPSLLTH\NKNM |
| | | 1 | l | | | VAKVDEVKSTIKFPNWRRCLCL |
| | 1 | | l | l | | AVAVGHVKMTDDELVYNIHLA |
| | | | | | | VNFLVSLLKKNWQNVRALYIK |
| | | L_ | | | | SPMGKPQRLY |
| 5574 | 35942 | Α | 5620 | I | 843 | |

| SEQ ID NO: | of peptide sequence | Met hød | SEQ ID NO: in USSN 09/540,217 | Nucleotide location of first codon for peptide sequence | codon for last amino acid of peptide sequence | Amino acid sequence (X=Unknown, *"Stop codon, /"possible nucleotide deletion, \"possible nucleotide insertion) |
|---------------|------------------------|------------|-------------------------------------|--|--|--|
| 5575 | 35943 | A | 5621 | 3 | 1215 | LLIMADPRDKALQDYRKKLLE HKEIDGRLKELREQLKELTKQV EKSENDLKALQSV\GQIIVGEVL KQLTJEEKFIVKATNGFRYVVG GARQOL-QKVSLKPGTRIVALJD MTTLTI\MEDILPR\(\text{LV}\) PLOYD MSHEDPG\(\text{INVSYSEIGGLS:\text{RG}\) HIPPK\(\text{GCLL}\) YGPPGTGKNT\(\text{LLA}\) RAVASQLDCNFLKVVSSSIVDK YGESARLIREMFNYARDHQPCI IFMDEIDAIGGRRFSEGTSADRE LORTLMELLN\(\text{MDF}\) DTDFLIRV KMTMATNRPDTLDPALLRPGR LDRK\(\text{HIDL}\) PNEQARLDIL\(\text{RIM}\) EDRTLMELLS\(\text{GY}\) GADLRN\(\text{CTE}\) GMFG GADLRN\(\text{CTE}\) GMFG FVSTGKTSLKAV\(\text{RV}\) ADSKKL ESKLD\(\text{KV}\) |
| 5576 | 35944 | Α | 5622 | 104 | 173 | |
| 5577 | 35945 | A_ | 5623 | 1 | 1140 | |
| 5578 | 35946 | A | 5624 | 1 | 528 | |
| 5579 | 35947 | A | 5625 | 1 | 1083 | |
| 5580 | 35948 | Α | 5626 | I | 471 | |
| 5581 | 35949 | Α | 5627 | 1 | 2322 | |
| 5582 | 35950 | Α | 5628 | 1 | 678 | |
| 5583 | 35951 | В | 5629 | 213 | 1477 | |
| 5584 | 35952 | Α | 5630 | 2 | 339 | FGLHKWGLGLEASSPCGPLTPS YLGFPRPHPGTLGLGRFWPFLA LQSLSETPSHARMPRVTVARTS PETLEISPLRAAT*NHRSSGHTC FRERMLRVSCRLSLDLSSSWVR |
| 5585 | 35953 | Α | 5631 | 1 | 783 | |

| SEQ ID | | | SEQ ID NO: | | | Amino acid sequence (X=Unknown, |
|--------|------------|-----|-----------------------|--|--|---|
| NO: | of peptide | hod | in USSN 09/540,217 | location of first codon for peptide | eodon for last amino acid of peptide sequence | *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
| | sequence | | 09/540,217 | sequence | or peptide sequence | determin, v-possime nacicottue insertion) |
| 5586 | 35954 | A | 5632 | 92 | 2746 | ASRMTVLQEPVQAAIWQALNF |
| | | | | | | YAYRDAVFLAERLYAEVHSEE |
| | | | | l | | ALFLLATCYYRSGKAYKAYRL |
| | | | | 1 | | LKGHSCTTPQCKYLLAKCCVD |
| | | | | | | LSKLAEGEQILSGGVFNKQKSF |
| | ŀ | | | | | DDIVTEFGDSACFTLSLLGHGH |
| | | | | l | | VQTERAAKGTAFSPKRLCLHT |
| | | | | İ | | PAWTPLEPLVEIGERPLPHQTFN |
| | | | | i | | FTS*RNFANCLHTSGTKQVTN\ |
| | | | | l | | HVFSHRQPETVLTETPQ\DTIEL |
| | | | | I | | NRLNLESSNSKYSLNTDSSVSY |
| | | | | l | | DSA VISP\DTVPLGTG\TSILSKP |
| | | | | I | | VQ\NKPKTGRSLLGGPAALSPL |
| | | ŀ | | 1 | | TPKFWGFLPIRKPP\SPG\DGS\Y |
| | 1 | | | | | LQNYTNTPPVIDVPSTGAPSKK |
| | 1 | | | 1 | | TFRVLQSVARIGQTGTKSVFSQ |
| | | | | 1 | | SGNSREVTPILAQTQSSGPQTST |
| | 1 | | | 1 | | TPQVLSPTITSPPNALPRRSSRL |
| | | | |] | | TSDSSTTKENSKKLKMKFPPKI |
| | | | | 1 | | NRKTKSKTNKGGITQPNINDSL |
| | l | | | | | EITKLDSSIISEGKISTITPQIQAF |
| | | | | | | NLQKAAAEGLMSLLREMGKG |
| | | 1 | | | | YLALCSYNCKEAINILSHLPSHI |
| | ŀ | | | | | YNTGWVLCQIGRAYFELSEYM |
| | | | | 1 | l | QAERIFSEVRRIENYRVEGMEI |
| | | | | | | STTLWHLQKDVALSVLSKDLT |
| | | | | | | DMDKNSPESGTQRGRESPRMC GADSQIEKSQSSYFIQDLSRFDY |
| | | | | 1 | | VKFAVVTKIRAWCAAGNCFSL |
| | | | | | | QREHDIAIKFFQRAIQVDPNYA |
| | | | | | l | YAYTLLGHEFVLTEELDKALA |
| | | | | | | FRNAIRVNPRHYNAWYGLGMI |
| 5587 | 35955 | _ | 5633 | 260 | 678 | GEFSIFFWVWN*LLLWHOETFS |
| 338/ | CCACC | A | 5033 | 200 | 070 | I*NLFSSH*TSITYQATEEGFDFI |
| | İ | | | i e | | QMKLIHFGDSIFIYLKLLILNRK |
| | | | | | | P**EAAISI*V*TWRSRFSHFQLF |
| | | | | | | *HQTQVTNHSWFTEAR*LTDL |
| | | | | | | KSKSPTIPCSRFKANTLF**SDP |
| 5588 | 35956 | A | 5634 | I | 1452 | |
| 5589 | 35957 | A | 5635 | 2 | 1563 | |
| 5590 | 35958 | A | 5636 | 1 | 444 | |
| | | | | | | |

| SEQ ID | | | SEQ ID NO: | | | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------------------|---------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amine acid | *-Stop codon, /-possible nucleotide |
| | sequence | | 09/540,217 | codon for peplide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 5592 | 35960 | A | 5638 | 2 | 1721 | RSREAAAVAAAAATTAFGCRI |
| 3372 | 33900 | 1 | 3038 | ľ | 11/21 | WNPCAALTMKQSSNVPAFLSK |
| | | 1 | | 1 | | LWTLVEETHTNEFITWSONGOS |
| | | 1 | | İ | | FLVLDEORFAKEILPKYFKHNN |
| | | 1 | | 1 | | MASFVRQLNMYGFRKVVHIDS |
| | | 1 | | | | GIVKQERDGPVEFQHPYFKOGC |
| | | 1 | | 1 | | DDLLENIKRKVSSSKPEENKIRG |
| | | 1 | | | | EDLTKIISSAQKVQIKQETIESRI |
| | | 1 | | | I | SELKSENESLWKEVSELRAKHA |
| | | | | 1 | | QQQQVIRKIVQFIVTLVQNNQL |
| | | | | | | VSLKRKRPLLLNTNGAQKKNL |
| | | | | | | FOHIVKEPTONHHHKVPHSRTE |
| | | | | 1 | | GLKPRERISDDIIIYDVTDDNAD |
| | | 1 | | | | EENIPVIPETNEDVISDPSNCSOY |
| | | | | 1 | | PDIVIVEDDNEDEYAPVIQSGEO |
| | | 1 | | | | NEPARESLSSGSDGSSPLMSSA |
| | | ı | | | | VOLNGSSSLTS\EDPV\TMDGFP |
| l | 1 | 1 | | | | FGMDNIQSFWGRVEL\LDY\LDS |
| | | 1 | | İ | İ | IDCSLEDFQAMLSGRQFSIDPDL |
| | | 1 | | | | LVDLFTSSVOMNPTDYINNTKS |
| l | | 1 | | | | ENKGLETTK\NNVVQPVSEEGK |
| | | 1 | | | | ENLKSKP\DK\QLIQYTAFPLLAF |
| 1 | | 1 | | l . | | LDG\NPASSV*TGRGTTASFRKF |
| | | 1 | | l . | | CPL*DKPIEVDELLDSSLDPEPT |
| | | 1 | | ı | | QSKLVRLEPLTEAEASEATLFY |
| | | 1 | | | | LCELAPAPLDSDMPLLDS |
| 5593 | 35961 | Α | 5639 | 2 | 251 | |
| 5594 | 35962 | Α | 5640 | 70 | 297 | QLRSPLKWKKAQRQPLAIAHV |
| | | 1 | | 1 | | LLLRPRKKRQNGFFTVRYARLL |
| | | 1 | | | | STLPRSWRR\KQWY*AQNHVRS |
| 5595 | 35963 | A | 5641 | 3 | 985 | PEWKWHYQSLS |
| 5596 | 35964 | A | 5642 | 1 | 3501 | |
| 5597 | 35965 | A | 5643 | i | 1752 | |
| 5598 | 35966 | c | 5644 | 1 | 879 | |
| 5599 | 35967 | A | 5645 | 21 | 519 | LHIPVRTLSCRFVGVCWRSTPG |
| 1 | | 1 | | | | PVCLGISSGGCRTVDIAALQLW |
| | | 1 | | İ | | LRGLALPEQLLR VDPHPQACRR |
| | 1 | 1 | | | | LPREPP\GPGQTFGTREPPQAVS |
| | | 1 | | | | TKEASSSNLHAPERTVAGLTFT |
| | | 1 | | | | TEQVRALEGVFRHHQYLGPLE |
| l | | | | | | RNWLAREMQLS\RSR*KPGFKI |
| | | L | | | | AG*NTNGKCRTPS |
| 5600 | 35968 | A | 5646 | 90 | 2401 | |
| 5601 | 35969 | A | 5647 | 776 | 1018 | |
| 5602 | 35970 | В | 5648 | 1 | 1296 | |
| 5603 | 35971 | Α | 5649 | I | 1257 | |
| 5604 | 35972 | A | 5650 | 731 | 4841 | |
| 5605 | 35973 | A | 5651 | 325 | 9497 | |
| 5606 | 35974 | A | 5652 | 1 | 322 | |
| 5607 | 35975 | Α | 5653 | 1 | 819 | L |

| SEQ ID NO: | SEQ ID NO: of peptide sequence | Met hod | SEQ ID NO: in USSN 09/540,217 | Nucleotide location of first codon for peptide sequence | Nucleotide location of last codon for last amino acid of peptide sequence | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
|---------------|--------------------------------------|------------|-------------------------------------|--|---|--|
| 5608 | 35976 | Α | 5654 | 56 | 251 | |
| 5609 | 35977 | A | 5655 | 149 | 701 | |
| 5610 | 35978 | Α | 5656 | 3 | 415 | |
| 5611 | 35979 | A | 5657 | 3 | 467 | AIASPRAAGIRHELTSTMAAGK NKRLTKGGKKGAKKKAV/DNII NIGKTLVTRTQRTKIASDGLKG RVFEESLADLQND\TDGYLLRVI *VAFTTERTNQI/REVFNKLIPDS IGKDIEKACQSIYPLHDDFARK |
| 5612 | 35980 | A | 5658 | 2 . | 418 | VKMLKKPKFELRKLMELHGEG PRVRADGKNFRLTKGGELGAR NKVVDPFSKKDWYDVKAPAM |
| | | | | | | FNIRNIGKTLVSRTQGTKIASDG LKGRVFEARLADLQNDEVAFIK CKLITDDVHGKNCLTIFHGMDL TRDKM'CSLGKKWQTMIEAHV DVKTTDGYLL |
| 5613 | 35981 | Α | 5659 | 3 | 121 | |
| 5614 | 35982 | Α | 5660 | I | 237 | |
| 5615 | 35983 | A | 5661 | 25 | 967 | FSPAAGIRHEÖSLTSTMAVGKN KRLTKGIGKRGSIKKKVVDPFP KRÜDWY*RKKHPLMFHIYKNIG KTLVTQDPKGPKIAISDGLQGF VCLKVSLADLQINDEVASRKG RLITEVCFRGKNIN PLTSRIGA DLYPVTKMCSHGQKNWQTMI DSSR*MFKTNPMGYLALRLFLC /VGFT*KNRNQFRLRKAPPYAS ATQQVPPKSRKKMMEIMTPR GARQNDLEKKWVNKLIPRQAL GKDIRKGPAQSYFIPLHIDVLRL EKLKLLEGSPK*IGESSLGASM GGRAVVPGKSHLGTQTGAKVG TSLMGYEPPYPRILV |

| NKLGIDGTYLKITRÄLYDK.PY NIILMOGKLEAPILKTOTROG LSPILPNIVLEVLAQAIROGE KGIOLOKEEVKLSLFADDMI LENPIYSA,OKLLKLINNSKY YKINVQKSQAFLYTNINQTE IMSEPPTIATKRIKYLGIQLT VKDLFKKYKPLINKIKEDTI WKNIACSWIGRINIMKMAFP WELNNENTWTQEGEHHTLO VGWGKRGIALVDIPNIVDI MVLEVLARAIROKKEKIGIQI KEEVKLSLFADDMIVYLENS SAQNLKLISNFSKVSGYKINI KSQAFLYTNINGTESQIMSE FITATKRIKYLGIQLTROVKD KENYKPLLKEIREDTIKWKY CSRIGRINIMKMALPKVIYRI DIPIKLPMTFTELEKTTLKFI NQKRACIAKTILSKKNIAGGI PDFKLYYKATVKTAWYW NRDIDQWIRTEASEVTSHIY LIFYKPDKNKKWGDSLFNK CWENVLAICRKLKDPFLIP | SEQ ID NO: | SEQ ID NO: of peptide sequence | Met | SEQ ID NO: in USSN 09/540,217 | Nucleotide location of first codon for peptide sequence | Nucleotide location of last codon for last amino acid of peptide sequence | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
|--|---------------|--------------------------------------|-----|-------------------------------------|--|---|---|
| MATKAKYDKWDVIKLKSFC KETTIR VSRQPTEWEKIFAIYI DKGLISRIYKELKQIYRKKTI | 5616 | 35984 | A | 5662 | | 2142 | MIILIDAEKAFDKIQQFFMLKTL NKLGIDGTYLKITRAIYOKPTA NKLGIDGTYLKITRAIYOKPTA NILINGQKLEAFPLKTGTRQGCE LSPLLFNIVLEVLAQAIRQEKEI KGIQLGKEEVKLSLFADDMILY LENPIVSAQKLLKILSNYSKYSG YKINVQKSQAFLYTNNRQTESG WESTPFTIATKRIKVLGIQLTSNY VKDLFKKYKPLLNKIKEDTNK WKNIACSWIGKNINIKMAPFR WELNNENTVTQEGEHHTLGFV YGWGKRGGIAL VDIPNVNDKL MYLEVLARAIRQKKEIKGIQLQ KEEVKLSLFADDMIYYLENSIV SAQNLKLISNFSKYSGYKINVQ KSQAFLYTNNRQTESGIMSEP FTIATKRIKYLGIQLTRDVKDLF KENYKPLLKEIREDTNKWKNIP CSRIGRINIMKMALIPKVIYRRN DIPIKLPMTFFTELEKTTLKFIW NQRRACIAKTLSKKNIAGGITL PDFKLYYKATVTKTAWYWYQ NRDIQWNRTEASEVTSHIYNH LIFYKPDKNKKWGNDSLFNKW CWENWLAICRKLKLDPFLTPYT KHSRWIKDLNVPRTIKTLEEN LGNTIQDIGMGKDFMTKTPKA MATKAKVDKWDVIKLKSFCTA KETTIRVSRQPTEWEKIFAIYPS DKGLISRIYKELKQIYKKYTNY DKGLUSRIYKELKQIYKKYTNY DKGLUSRIYKELKQIYKKYTNY DKGLUSRIYKELKQIYKKYTNY DKGLUSRIYKELKQIYKKYTNY DKGLUSRIYKELKQIYKKYTNY DKGLUSRIYKELKQIYKKYTNY |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hed | in USSN | location of first | codon for last amino acid | *=Step codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \-possible nucleotide insertion) |
| | | | | sequence | | |
| 5617 | 35985 | A | 5663 | 1391 | 2742 | KKRESSLTHVMRPASF*YOSOA |
| 2011 | 00700 | Γ. | | | | ETQQKKRILDQYP**TLMQKSSI |
| | | 1 | | | ĺ | K/YLAKRIQQHIKKLIHHDOVGF |
| ŀ | | 1 | | | l | IPGMQGWFNIRKSINVIQHINRA |
| | | l | | | | KDKNHMIISIDAEKAFDKIQOPF |
| ŀ | | 1 | | | | MLKTLNKLELEETTVKFIWNQ |
| l | | 1 | | | | KRAHIAKSILSQKNKAGGITLR |
| | | l | | | ŀ | DFKLYYKATVTKTAWYWYQN |
| 1 | | | | | | RDIDOWNRTEPSEITLHIYNYLI |
| | | 1 | | | 1 | FDKPEKNKQWGTDSLFNKWC |
| | | 1 | | | | WENWLAICRKLKLDPFLTPYTK |
| l | | 1 | | | | INSRWIKDLNVRPKTIKTLEENL |
| | | | | | l | GITIQDIGMGKDFMSKTPKAMA |
| l | | | | | | TKAKIDKWDLIKLKSFCTAKET |
| | | | | | | |
| | | l | | | | TIRVNRQPTKWEKIFTTYSSDK |
| | | l | | | | GLISRIYNELKQIYKKKTNNPIK |
| | | ļ | l | | ! | KWAKDMNRHFSEEDIYAAKKH |
| | | l | l | 1 | 1 | MKKCSSSLAIREMQIKTTMRYH |
| 1 | | | | | | LTPVRMAIIKKSGNNRHAPFSIH |
| 1 | | | | | | THIMFGSLYLQIQKDLSILGFW |
| | | _ | | | | YPRGILEPIY |
| 5618 | 35986 | A | 5664 | 1 | 1910 | MTHNHHHTHTHIVHHTINIVIT |
| | | 1 | | | | TTILTTVIISSTIIIITIFVFETGAI |
| | | | | | | KLEIRIKKLTQNRSATWKLNNL |
| | | | | | 1 | LLNDYWVHNEMKAEIKMFFET |
| | | 1 | | | | NENKDTTCQNLWDTFKAINKID |
| 1 | | | | | | RPLARLIKKKREKNQIDAIKND |
| | İ | | | | | KGDITTDTTGIQTTIREYYKHLY |
| | | l | | | | ANKLENREEMDKFFDTYTLPRL |
| | | l | | 1 | 1 | NQEEVESLNRPITGSKIEEIINSL |
| | | | | | | SIKKSPGPDGFTAEFYQRYKEE |
| | | l | | | i | LVPFLLKLFQSIEKEGIILNSCCE |
| | | l | | | | ASIILIPKPGRDTTKKENFRPISL |
| i | | l | | | | MNIDAKILNKTLANRIQQHITK |
| | | 1 | | | | LIHHVQVGFIPGMQGWFNIRKS |
| | | l | | | | INNWKKTTLKLIWNQKRACITK |
| | | 1 | | | | SILSQKNKAGGITLPDFKLYYK |
| | | | l | | | ATVTKTAWYWYQNRDIDQWN |
| | | | | | | RTEASEIIPHTYNYLSFDKPDKN |
| | | 1 | l | İ | l | KKWGNNSLFNKWCWENWLAI |
| | | | l | | | CRKLKLDPFLTLYTKINSRWIK |
| | | | l | | | DLNFGTETIKTLEENLGNTIHDI |
| | | | | 1 | | GMGKDFMSKTPKAKATKAKID |
| 1 | | 1 | l | | | KWDLIKLKSFCTAKETTIRVNR |
| | | 1 | I | 1 | | QPTEWEKIFAIYPSDKGLISRIY |
| 1 | | 1 | l | 1 | | KELKQVYKKKTNNPIKKWAKD |
| | | | | 1 | | TNRHFSNEDIYAANRHMKKCS |
| 1 | | 1 | 1 | 1 | | SSLAIREMQIKTTMRYHLAPVR |
| | | | | 1 | | MTIIKKSGSNRQ/W*ASGHVRC |
| | | | | | | · |

| SEQ ID | SEQ ID NO: | | SEQ ID NO: | | | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------------------|---------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 5619 | 35987 | A | 5665 | 1 | 2460 | MPHAGHARSPGHTLIKLAEWW |
| | | | | | | MSRWMEWNPGFPLSIDAKCHK |
| | | 1 | | | | DLPRDIQFDSEKGVDFVLNYSK |
| | | | | | | ALNQEEVESLNRPITGSEIEAIIN |
| | | İ | | | | SLPTQKSSGPDGFTAEFYQRYK |
| | | | | | | EELVPFLLKLFQSIEKEGILPNSF |
| | | | | | ļ | YEASIILIPKPGRYTHKKNNFRP |
| | | | | | | SLMNIDAKILNKILANRIQQHIK |
| | | | | | | KLIHQDQVGIIPGMQSWFNIHK |
| | | 1 | | | | SINVIQHINRTKDKNHMIISIDAE |
| | | 1 | | | 1 | KAFDKIQQPFMLKTLNKL\GIK |
| | | 1 | | | | YLRIQLTRDVKDLFKENYKSLL |
| | | | | | | NEIKEDTNKWKNIPCSWIGRMN |
| | | | | | | IIKMAI/LPKVIYRFNVIPIKLPMT |
| 1 | | 1 | | | 1 | FFSELEKSTLKFIWNQKRARIAK |
| | | 1 | | | 1 | TILSQKNKAGGIMLPDFKLYYK |
| | İ | 1 | | | | ATVTKTA WY WY QNRDIDQWN |
| | | ı | | | 1 | RTEPSEMTPHIYNHLIFDKPDKN |
| | | | | | | KQWGKDSLFNKWCWENWLAI |
| | | | | | 1 | GRQLKLDPFLTPYTKINSRWIK |
| | | | | | | DLNVRPKTIKTLEENLGNTIQDI |
| | | | | | | SMGKDFMSKTPKAMATKAKM |
| | | | | | | DK WDLIKLKSFCTAKETTIRVN |
| | | l | | | | RQPTEWEKNFAIYSSDKGLISRI |
| | | 1 | | | | YKQLKQIYKKKTNNPIKKWAK |
| | | I | | | | DMNRHFSKEDVYAANRHMKK |
| | | 1 | | | | CSSSLAIREMQIKTIMIYHLTPV |
| | | 1 | | | | TMAIIKKSGNNRCWRGCGEMG |
| | | 1 | | | l | TLLYCWWDCKLVQPLWKTLW |
| | 1 | 1 | | | | QFLRDLELGIPFDPAIPLLGIYPK |
| | | 1 | | | | DYKSCCYKDTCTPKLARDDQI |
| | | | | | | HILKQHRRKELETRQKQYRAW |
| 5620 | 35988 | Α | 5666 | 689 | 1909 | LIAYQPKKSRTRWIHNQILPERI |
| | İ | | | | | KYLGIQLTRDVKDFLKEKYKPL |
| | | 1 | | i . | | LNEIKEDINKWKNIPCSWIGRIN |
| | | 1 | | | | LVKMAIL/PQAICRKLKLDPFLT |
| | | 1 | | | | TYTKINSRWIKDLHVRPKTTKT |
| | | 1 | | | | LEENLGNTIQDIGMGKDFMSKT |
| | | ı | | | | PKAMATEAKIDKWDLIKRKSFO |
| | | 1 | | | | AAKETTTRVNRQPTDWEKMFA |
| | | ı | | | ł | IYSSDKGLISRIYEELKQIYKKK |
| | | | | | | TNNPINKWAKDMNRHFSKEDI |
| | | 1 | | | | YAANRHMKKCSSSLAIREMQIK |
| | | 1 | | | | TTVSPFAAQWVSQRYGK WQEA |
| | | 1 | | | | HPSNNDGKGYRGKPRFQSLSD |
| 1 | 1 | 1 | | | l | VHGPQDQKKIIKESALPPTPTFI |
| | | 1 | | | | NILMNAKTIENGQFPYLLNALK |
| | 1 | 1 | | | | QQQPHDAENLFTWGKENAAIV |
| | | 1 | | | | SPCIEVSAALSQWKVPAWPQRS |
| | 1 | 1 | | | | GIPNRILRSPIPGLGSWVAFLDL |
| L | 1 | | | | | VWVRGDPTALK |

| SEQ ID NO: | SEQ ID NO: of peptide sequence | Met | SEQ ID NO: in USSN 09/540,217 | Nucleotide lucation of first codon for peptide sequence | Nucleotide location of tast codon for last amino acid of peptide sequence | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide detetion, \=possible nucleotide insertion) |
|---------------|--------------------------------------|-----|-------------------------------------|--|---|--|
| 5621 | 35989 | В | 5667 | ı | 1962 | |
| 5622 | 35990 | В | 5668 | I | 1851 | |
| | | | | | | IHHDQVGFIPGRQGWFNICKSIN VIQHINRAKDKNHMIISIDAEKA FDKIQQLFMLKTLNKLGIDGTY FKIIRAHYDKPTANILINGKKLEA PLKTGTRGCPLSPLLFNILLE VLARAIRQEKEIKGIQLGKEEV KLSLFADDMIVYLENPIVSAQN LKLKISNFSKVGYKINVQKSQ AFLYTINNRQTESQIMSELPFTIA SKRIKYLGIQLTRDVKDLFKEN YKPLLKEIKEDANKWKNIPCSW VGRINVKMAILPKVIYRFNAHPI KLPMFFFELEKTTLKFIWNQK RAHITKAILSQKNKARGITLPDF |
| | | | | | | IL YYKATVTKTAWYYQNBU DOWNRTOPSEITPHINYLYLIFD KPDKNKQWGKGSLFNKWCWE NWLAICRELKLDPFLTPYTKIN SKWIKDLNYRFKTTKTLEENLG TIODIGMGMDFMSKTPKAMAT KOKIDK WDLIKLK SFCTAKETT IR VNRQPTKWEKIFITYSSDKG LISHIYNBLKQIYKKTNNPIK MXKCMSPISLAIREMQIKTTMRYH LTPWRMAIKKSGNNRCWRG GEIGTLLHCWIWINWMKKTWH IYTMEYYASIKKNEFMSFAGA* |
| 5624 | 35992 | Α | 5670 | 2 | 1967 | |

668

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------------|----------------|-----|------------|-------------------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 5625 | 35993 | Α | 5671 | 1039 | 2272 | KKRESSLTHVMRPASF*YQSQA |
| | | | | | | ETQQKKRILDQYP**TLMQKSSI |
| | | | | | | K/YLAKRIQQHIKKLIHHDOVGF |
| ŀ | | | | | | IPGMQGWFNIRKSINVIQHINRA |
| | | | | | | KDKNHMIISIDAEKAFDKIQQPF |
| ŀ | | | | | | MLKTLNKLELEETTVKFIWNQ |
| | | | | 1 | | KRAHIAKSILSQKNKAGGITLR |
| | | | | 1 | | DFKLYYKATVTKTAWYWYQN |
| l | | | | | | RDIDQWNRTEPSEITLHIYNYLI |
| | | ļ | | | | FDKPEKNKQWGTDSLFNKWC |
| 1 | Ì | | | | | WENWLAICRKLKLDPFLTPYTK |
| | | ĺ | | i | | INSRWIKDLNVRPKTIKTLEENL |
| | | 1 | | | | GITIQDIGMGKDFMSKTPKAMA |
| | | 1 | | 1 | | TKAKIDKWDLIKLKSFCTAKET |
| | | | | | | TIRVNRQPTKWEKIFTTYSSDK |
| l | l | l | | | | GLISRIYNELKQIYKKKTNNPIK |
| l | 1 | | | | | KWAKDMNRHFSEEDIYAAKKH |
| | | Ì | | | ŀ | MKKCSSSLAIREMQIKTTMRYH |
| | | | | | | LTPVRMAIIKKSGNN |
| 5626 | 35994 | Α | 5672 | I | 3477 | |
| 5627 | 35995 | A | 5673 | 1 | 2814 2093 | |
| 5628 5629 | 35996 35997 | A | 5675 | 1 | 2724 | |
| 5630 | 35998 | A | 5676 | 1 | 4680 | MDKFLDTYTLPRLNQEEVESLN |
| 3030 | 33990 | ^ | 3070 | ' | 4080 | RPITGSEIVAIINSLPTKKDPGPD |
| | | l | | | | GFTAEFYORIKYLGIOLTROVK |
| | | | | | | DLFKENYKPLLKEIKEDTNKW |
| | | | | į. | | KNIPCSWVGRINIMKMAILPKVI |
| | | 1 | | | | YRFNAIPIKLPMTFFTELEKTTL |
| | | 1 | | | | KFIWNQKRARITKSILSQKNKA |
| | | l | | | İ | GGITLPDFKLYYKATVTKTAW |
| İ | | l | | | | YWYONRDIDOWNRAEPSEIML |
| ŀ | | l | | | | PIYNYLIFDKPDKNKQWGKDSL |
| | | l | | | | FNKWCWENWLAICRKLKLDPF |
| | | l | | | | LTPYTKINSRWIK |
| 5631 | 35999 | В | 5677 | 1 | 1989 | |
| 5632 | 36000 | A | 5678 | 1 | 2784 | |
| 5633 | 36001 | В | 5679 | 1 | 3573 | |
| 5634 | 36002 | В | 5680 | 1 | 2630 | |
| 5635 | 36003 | Α | 5681 | 5339 | 10577 | |
| 5636 | 36004 | A | 5682 | 1 | 873 | |
| 5637 | 36005 | Α | 5683 | 1 | 672 | |
| 5638 | 36006 | Α | 5684 | 1 | 435 | L., |

| SEO ID | SEO ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | ŀ | | sequence | | |
| | | | | | | |
| 5639 | 36007 | Α | 5685 | 1 | 1011 | MVRFGDELGGRYGGPGGERA |
| | | | | | | RGGGAGGAGGPGPGGLQPGQR |
| 1 | | ŀ | | | | VLYKQSIAQRARTMALYNPIPV |
| | | Į. | | | ŀ | KQNCFTVNRSLFVFSEDNVVRK |
| 1 | | | | | | YAKRITEWPPFEYMILATIIANC |
| | | | | | | IVLALEQHLPDGDKTPMSERLD |
| | | | | | | DTEPYFIGIFCFEAGIKHALGFV |
| | | | | | | FHKGSYLRNGWNVMDFVVVL |
| l | | | | | | TGRKAGLGCCGSGVESGGWGD |
| | | l | | | | RSSSPAMEQSRMENDFDELTEV |
| | | | | | | GFRKSVITNFSELKE\DVRTHRK |
| | ļ | | | | | EAKNLEKRLDKM\VNRINSVEK |
| | | l | | | | TLNDPMELKTMARELCDACTS |
| | | | | | 1 | FSS*FNQVEEKVSVIEDQMDEM |
| | | | | | | K*EEKFREKRVKRNEQSLQEIW |
| | | | | | İ | DYVKRPNLRL |
| 5640 | 36008 | Α | 5686 | I | 1539 | |
| 5641 | 36009 | Α | 5687 | I | 756 | MDDPRLNVKPLTESLETYSGKS |
| | | | | | | KGLEGDVITDSKLNDCRCPSGT |
| | İ | | | l | 1 | KLPEEGLGSNICCSAIFAVLOPL |
| | | | | | | LVIPROTGSGVDHQQTPTDLRM |
| i i | | | | | 1 | TVRRKMNKOKGIASTSTKRTK |
| | | | | | | KDIHTKTPSVCHQHQRPKDCSP |
| | | | | | i | SPATEOSWMENDLEELTEIGFR |
| | | | | | i | RSVITNFSELKEDVRIHHKKAK |
| 1 | | | | | | NLGKRLDEWLTRINSVEKTLND |
| | i | | | | | LMELKTMARELHDSCTSFNSRS |
| | | | | | | NOAEEKVSVIEDOFNEIKREEK |
| 1 | | | | | | FREK\RVKRN |
| 5642 | 36010 | Α | 5688 | 1 | 1008 | MVRFGDELGGRYGGPGGERA |
| | | | | | | RGGGAGGAGGPGPGGLOPGOR |
| | | | | l | | VLYKOSIAORARTMALYNPIPV |
| | | | | l | | KONCFTVNRSLFVFSEDNVVRK |
| | | | | | | YAKRITEWPPFEYMILATIIANC |
| | | | | | | IVLALEOHLPDGDKTPMSERLD |
| | | | | | | DTEPYFIGIFCFEAGIKIIALGFV |
| | | | | | | FHKGSYLRNGWNVMDFVVVL |
| 1 | 1 | ĺ | 1 | 1 | | TGRKAGLGCCGSGVESGGWGD |
| 1 | l | l | | I | | RSSSPAMEOSRMENDFDELTEV |
| | | | | | | GFRKSVITNFSELKEDVRTHRK |
| | | | | | | EAKNLEKRLDEWLTRMNSVEK |
| 1 | l | ĺ | l | | | TLNDLMELKTMARELRDACTS |
| - | | l | | 1 | | FSSQFDQVQEMVSVIQDQISEM |
| | | l | | | | KREEKFREKRVKRNE/QSLQ*I |
| | l | l | l | İ | | WDYVERPNLRL |
| 5643 | 36011 | A | 5689 | | 672 | WDIVERFINERE |
| 5644 | 36012 | A | 5690 | 1 | 807 | |
| 5645 | 36012 | A | 5691 | i - | 1617 | |
| 2042 | 20012 | | 12021 | 1 | 1017 | L |

| SEQ ID | SEQ ID NO: | | SEQ ID NO: | | | Amino acid sequence (X=Unknown, |
|--------------|----------------|-----|--------------|-------------------------------|---------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | "=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | , | | |
| 5646 | 36014 | Α | 5692 | 1064 | 1893 | LLEGSININKKDIYTKTQSVGRQ |
| | | | | | | HQRPKVDKTTKMGRNQNRKA |
| | | l | | | | ENSKNQSASSPPKDC\SSSPAME |
| | | | | | | QSWMENNFDELTEIGFRRSVIT |
| | | | | | | NFSELKEDVQTHCKEAKNLKK |
| | | 1 | | | | RLDECLTRINSVEKKTLNDLME |
| | | | | | | LKTMAQELHDTCTSFNTQFDQ |
| | | | | | | VEERVSVIEDQINEIK*EEKFRE |
| | | l | | | | K\RVKINE*SCQEIWD*VKRPNI |
| | | l | | | | HLITVPESDGEKGTKLENTLQDI |
| | | 1 | | | | IQENFHNIARQANIQIQEIQRTA |
| | | 1 | | | | QRYSSRTATPRHIIVRFAKVEM |
| | | | | | | KEKVLRAARKKG |
| 5647 | 36015 | A | 5693 | 3 | 620 | EAGWLLLSSVDEVMKENDELR |
| | | | | 1 | 1 | DSISQLQKQILSLKSAKIALTESL |
| 1 | | 1 | | | | ISFRERAEIVEKQTQALIM*VAD |
| | | | | 1 | | LQQGNDQTFQGLLDTGSELTLI |
| | | | | | | PGDPKHHCGPPGPKVRAYGDQ |
| | | | | | | VINGVLAQVQLIVGPVGPWTHP |
| | | 1 | | | | VVISPVPECVIGIAILNSWQNPHI |
| ľ | | | | | | GSLTGRVRAIMVGISWQGQQY |
| | | | | | | TFTVLPQRYINFPALCHKTAKR HTARR |
| 5648 | 36016 | A | 5694 | 1 | 1098 | HIARK |
| 5649 | 36017 | Α. | 5695 | 2 | 563 | IIRRAVFRWFWG*RSWGLNMIR |
| 3049 | 30017 | ľ`. | 3093 | 1 | 303 | PONTKOSNSNCLEKTOSPWCEL |
| | | | | | | FKELYKINAFDTPDSLLMRGNE |
| | | ŀ | | | | FSDPIHHTFDHMWRTKEHNEA |
| | | i | | | | GWLLLSSVDKVMKENDELGDS |
| | | | | | | ISQLQKQILSLKSAKIALSESLIS |
| | | [| | | | CRERAEIVEK*T*ALIMLVADL |
| 1 | | | | | | Q*KVHAQPHHAQPRQVSTVKV |
| | | | | | | RALIVLOEVTDP |
| 5650 | 36018 | A | 5696 | I | 499 | FVLVDVNNMWHRYASMLYER |
| | İ | | | | | RLLIICSKLSTLTACIHGFAAML |
| | | | | | | YPMYWQHVYI\PVLPPHLLDYC |
| | | | | | | CAPMPYLIGIHLSLMEKVRNMA |
| | | ľ | | | | LDDVVILNVDTNTLETPFDDLQ |
| | | ŀ | | | İ | SLPNDVISSLKNRLKKVSTTTG |
| | | 1 | | 1 | | DGVARAFLKAQAAFFGSYRNA |
| | | | | | | LKIEPEEPITFCEEA |
| 5651 | 36019 | Α | 5697 | 1 | 795 | |
| 5652 | 36020 | A | 5698 | 103 | 3531 | |
| 5653 | 36021 | A | 5699 | 1 | 2073 901 | |
| 5654 5655 | 36022 36023 | A | 5700 5701 | 148 | 639 | |
| 5656 | 36024 | A | 5702 | 148 | 318 | REYGTPOEOLNLALLTLNFLSL |
| 1000 | 30024 | l^ | 3702 | Ι. | 310 | PKGOMLSAAEOHLOKPAAKTE |
| | | 1 | | | | A/GRMIWORDPITKIWEIGKIIT |
| | | | | | | WGRGYACVSPGONHOSVWIPS |
| | | 1 | | | | RHLKSCHGPDAKEEIPGGS |
| | I | i | | 1 | | TOTAL DARKELII 003 |

| SEQ ID NO: | SEQ ID NO: of peptide sequence | Met hod | SEQ 1D NO: in USSN 09/540,217 | Nucleotide location of first codon for peptide sequence | Nucleotide location of last codon for last amino acid of peptide sequence | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
|---------------|--------------------------------------|------------|-------------------------------------|--|---|---|
| 5657 | 36025 | A | 5703 | 1 | 612 | PITEPIKHITDIPYNSEGQAIVER MNLSLKQQLQKHKKGGK/SKD YGTPHMQLNLALLTLNFLSLPK GQILSVAEQHLQKPAAKTEAEQ CLVWWRDPITKS*EIGKITWGK GYACVSPGLTQOPIWIPSRHLK PYHEPDAEEEIPGGSRGPPPPV DSHVETDAEEEPIGHEGHLSNT ATHLGTDQEAVTAGGRKPEES KTTSINK |
| 5658 | 36026 | Α | 5704 | 2 | 791 | |
| 5659 | 36027 | A | 5705 | 2301 | 2620 | DGQQLIALHRLALRELQQAGH AGLPQQAKILFDGGSEIGKIRGL QRPRAKNRLSGRGPLREPSPK*F FGVQGRKTLNRTLKGAPH*NL AAKAGKPLSPCTSGRIRM |
| 5660 | 36028 | A | 5706 | | 1010 | INDDIPOEAGRYRHNOAYAYSI QOGDAEDDDERIVRFHTRVTV DSDTLASDAARLTCRIEGLGNQ GSDLVLYGTSTPKNLLWVRVH VOGHRDDRFFAFDVWSPRSLI VDSCSKLEQHSTLSRAILLIYKG FCRFRNHIQTGSFPAGANQRGP LAATLSGFGGEGGSAVARLTGE KKNHPGAQYANRLSPRVGRFN AAGTTGFPTGKRAVSATQLMD FADFGTTIKQDFRLLQQTSVDR LLQLSQGQANVQQFIDEGNYTS GDNHTLRDPHYVEDKGHKYLV FEANTGTENGYQGESLFNKA YYGGGTNFFRKSQKLQSAK KRDAELANGALGHELNNDYTL KKVMKPLITSNTVTDEIERANVI FKMNGK WYLFTDSRGSKMTU GINSDIYMLGYVSNSLTGPYK PLNKTGLVLQMGLOPNDVFTFT SYSHFAVPQAKGNNVVITSYMT RGSSR'RQRP*IPCIRSTGMRK IPRSKNLYLTKRTAAARTSS VKKARSFSRALKNAMLS*FTAP |
| 566 I | 36029 | В | 5707 | 1 | 1149 | |
| 5662 | 36030 | В | 5708 | 55 | 3947 | |
| 5663 | 36031 | В | 5709 | 4 | 885 | |

| SEO ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | coden for last amino acid | *-Stop codon, /-possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 5664 | 36032 | Α | 5710 | 461 | 1560 | SLQTRDLPISEPPSNRIFACWGK |
| | i | | | | | PAWTACCNSLRARR*RAISCCP |
| | | | | | | SH*KRIPRRRIFI*PKRTTAAART |
| | | | | | | SSVKKARSFSRALKNAMLS*RT |
| | | | | | | APSVS*S*IMITH*KK**SR*SLO |
| | | | | | | TRDLPISEPPSNR\FSPAGANOR |
| ŀ | | | | | | GPLAATLSGPGGEGQSAVARLT |
| | ŀ | | | | | GEKKNHPGAQYANRLSPRVGR |
| ļ | | | | | | FINAAGTTGIPDWKAGSERNAI |
| | | | | | | NGAIALIEGFRPLTLEPSSLIVNS |
| | ŀ | | | | | CSKLEOHSTLSRAILLIYKGFCR |
| | | | ٠ ، | | ļ | FRNHHOTGFSPAGPNORGPLAA |
| | 1 | | | | | TLSGPGGEGQSAVARLTGEKK |
| | | | | | | NHPGAQYANRLSPRVGRFINAA |
| | 1 | | | | | GTTGFPTGKRAVSATOLM |
| 5665 | 36033 | В | 5711 | 1 | 1458 | |
| 5666 | 36034 | В | 5712 | 1 | 3573 | |
| 5667 | 36035 | Α | 5713 | 606 | 1005 | GGMLCGTLSGPDGEGOSAVAR |
| | | | | | | LTGEKKHPRGDQ*QKAPLLAR |
| | | | 1 | | | W/RNPLMOLAO/PDFPTGKRAI |
| | | | | | 1 | DTHRSVSHAHIJITJHSSTLSSDIS |
| 1 | | | | | | HTDAPNTSSNNYVIAITSPSDTA |
| | | 1 | | | | PTSRTPLHRIHHTTPIPIATLARP |
| 5668 | 36036 | В | 5714 | I | 1566 | |
| 5669 | 36037 | С | 5715 | 29 | 2314 | |
| 5670 | 36038 | Λ | 5716 | 597 | 1384 | ISYTVPEALSARSNPA ACQHAS |
| | | | | | | CRPAACPVASVGSPRQPAPGGA |
| | | | | | 1 | GGHRHWPRRRWRLRQRPRPSA |
| ŀ | l | | | | | PGRPRRPRPRPRRHRRRPRPHP |
| | ŀ | | | | | HHAPPPRPSCAETRS\RRGGGRR |
| | | ŀ | | | | PLPRPLPPGAAGAGHREVGDK |
| | | ŀ | | | | AGAAGCGRRVVALAA\PVSPPS |
| | | l | | | | SPSSPSPSLLSAAVGVAGCFSAE |
| | | l | | | | LSDSRRLLAPGGEGPLARSPAR |
| | l | ŀ | | | | CDPAAGSACPAGWSSRQRSRC |
| | | | | | | ELMCAAGISCWHTGHCTWCSL |
| | | | | | | SFMPLVLMILAASFRPVAVSSH |
| 5671 | 36039 | В | 5717 | 1 | 3873 | |
| 5672 | 36040 | C | 5718 | 356 | 784 | |
| 5673 | 36041 | Α | 5719 | 1303 | 1664 | KRRDEIIPCVLSKQLLVTFITCR |
| | | 1 | | | | ASCINESANARGEAVCVLGAR |
| | | 1 | l | | | VV/SSFHQ*DGQQLIALHRLALR |
| | | l | | 1 | | ELQQAVHAGLPQQAKILFDGGS |
| | | | | 1 | | EIGKIPYKSKE*PENRLSVVPVW |
| 1 | 1 | | | 1 | | EQESTLASV |

| SEQ ID | | | SEQ ID NO: | | | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------------------|---------------------------|--|
| NO: | of peptide | bod | in USSN | location of first | codun for last amino acid | *=Stup codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 5674 | 36042 | Α | 5720 | 453 | 915 | TVSRWAMLEHILLFSREPSNKE |
| | | | | l | | PET*AHSM*ADDKRFAAYKKK |
| | | ĺ | | | | TKGGTERWDKYGRRPANGIRT |
| | | | | | | GENNAKTEHLRDRDQKR/PREI |
| | | | | | | ERAR*TTEITEQEGSG*GEPVEG |
| | | l | | | | MRKRRAQAWSRRKSTGSQTET |
| | | ĺ | | l | | RSVRVTRVGLKTASESRRIRTM |
| | | | l | l | | EQN |
| 5675 | 36043 | В | 5721 | 319 | 1469 | |
| 5676 | 36044 | В | 5722 | 164 | 3112 | |
| 5677 | 36045 | Α | 5723 | I | 1102 | MRWTPGHEITKALQTFQRYTG |
| | | | | | | QHVHRIGMAERMWCDRNRER |
| | | | | | | HTVSSSGGNRLPNPEHFEAFQS |
| | | | | | | VAQCTYNQTVQLDITAFLKTV |
| | | | | | | KKNKHKFYPAFIHILARLMNAI |
| | | İ | | i | | PEFRMAMKDVDSCSKLEQHST |
| | | l | | | | LSRAILLIYKGFCRFRNHHQTG |
| | | | | | | SPAGANQRGPLAATLSGPGGE |
| | | | | | | QSAVARLTGEKKNHPGAQYAI |
| | | | | | | RLSPRVGRFINAAGTTGFPTGK |
| | | | | | | RAVSATQLIYRELFPQPLVQLD |
| | | | | | | PCSVPCMQPPTSPKSRAWVSDI |
| | | | | | | ALLEFQKKKEMEKKKEKERK |
| | | ŀ | | | | ELQGGRGRRRGGGWGKGRER |
| | | l | i | | | GGRGKKRRGGGEAIRDAEKAG |
| | | | | | | RLPHPDMEIRGRVEQRVGYTIE |
| | 1 | l | | | - | QINHMRDVFGTRLRRAEDVFP |
| | 1 | | | | | VIGVAAHKGGVYKTSVSVHLA |
| | | | | | | QDLALKGLRVLLVEGNDPQG1 |
| | 1 | | | | | ASMYHGWVPDLHIHAEDTLLF |
| | | l | | | | FYLGEKDDVTYAIKPTCWPGL |
| | | | | | | DIIPSCLALHRIETELMGKFDEC |
| | | | | | | KLPTDPHLMLRLAIETVAHDYI |
| | | | | | | VIVIDSAPNLGIGTINVHPAWG: |
| | | 1 | | | | AISLLEYSPGHLAGFVASIPAPL |
| | | | | | | QLVPRWDTKPVLEDASASSRF: |
| | | | | | | IPQRNPTHLHPTTSFPSCNPDTV |
| | | | | | | DAWMRFLITWCLYTSPYSTLM |
| | | | | | | GELFPFYQGMLLESTKQGSQVI |
| | | | İ | l | | KVFVWTLVPNWNNTQPYSRAI |
| | 1 | 1 | | 1 | | LLIYKGFCRFRNHHQTGFSPAG |
| | | _ | | | | ANQRGPLAATLSGPGGEGQSA |
| 5678 | 36046 | В | 5724 | 90 | 6258 | |
| 5679 | 36047 | Α | 5725 | 837 | 1485 | |
| 5680 | 36048 | Α | 5726 | 1 | 2993 | |
| 5681 | 36049 | A | 5727 | 1 | 123 | |
| 5682 | 36050 | Α | 5728 | I | 960 | |
| 5683 | 36051 | Α | 5729 | 507 | 755 | NKRGYKQMEEHSMLMGRKNO |
| | | 1 | | l | | YRKNGHTAQGNL*IQCHPHQA |
| | | | | | | TNDFLHRIGKNDFQVHMEPKK |
| | I | | | | | SPHRQVNPKPKEQSWRHHAT |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|------------|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequenec | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 5684 | 36052 | A | 5730 | 274 | 882 | PDQVDRGGAHWQTDADDPWL |
| | | ľ. | | | | ADHLQHCQRCGEILRHYSGGIR |
| | | | | | | GNVSAVKCAEHHVPAFARLRN |
| | | 1 | | | | POCGDFORLDYRLFDSPGVKRR |
| | | l | | | | EL*TAYRFCHVAP*LMDLRSG |
| | | | | | | WAAGAVYRYQSH*FTADRLRS |
| | | | | | | VDMDEAGNHHSQQT\SQDQKI |
| | | | | | | KORTFSLISGS*TTRTHGHREGN |
| | | l | | | | ITHRGLSRPNTARILCASKAHLG |
| | | | 1 | ļ | | LPLRSSLP |
| 5685 | 36053 | Α | 5731 | 114 | 329 | |
| 5686 | 36054 | C | 5732 | 1 | 1983 | |
| 5687 | 36055 | С | 5733 | 1 | 588 | |
| 5688 | 36056 | Α | 5734 | 1 | 597 | |
| 5689 | 36057 | A | 5735 | 1 | 721 | MTSYNEQNKKPVTDPNEMAIH |
| ŀ | | | | l | | EDSNQEFKIAVVNETQRSPRSSP |
| | | | | ļ | | TEHLMTPPPLPTREQQPPLTVIF |
| | | | | 1 | | HYLPKSYKTAPPLSPFPDSLFGL |
| | | 1 | | ŀ | | SQPAPRDMDEAGNHHSQQT\K |
| | | | | | | QEQKTKHCMFSLTSGS*TMRTH |
| | | | | İ | | GHREGTVIHRGLLGQFSQQLIN |
| | | | | | | KSEFSNTVCREKSGRVLQVNM |
| | | | | 1 | | ESPL*MIQDALQDQTTPKGPITV FL*LFYLDHLLRSSHKVASYLST |
| | | | | 1 | | ESRSRGSITVLFIRCSEP |
| 5690 | 36058 | A | 5736 | 417 | 696 | DRNRKANTACFQHSQVGVEQ* |
| 3090 | 20020 | <u> </u> ^ | 3730 | 7'' | 0,0 | EHMDTGKV*SI*YGNYEHTSTC |
| | | | | | | ERMEIOKATTEHLNL*S*SGSFL |
| | | | | l | | RFTWKMLQFSKISRSFYQVLKH |
| | | ı | | İ | | OOKIM |
| 5691 | 36059 | A | 5737 | 325 | 1489 | RSPTLLMHVHYIKVISWRELLLI |
| | 50007 | 1 | | | | WLRAANASINPG VEQSPSGDPK |
| | | 1 | | | | TVTGFPFLRLEAADWVEEASVP |
| 1 | | | | | | KGVHIALSSQEQRAGDPRDLEA |
| | | | | | | PSNLVISERTHRSFRVSWTPPSD |
| | | į | | | | SVDRYKVEYYPVSGGKRQEVV |
| | | | | | | RTPGVPDLRLPAIIPOAAWLLA |
| 1 | | | | | | HLPAPSAPPTELPTKHTEAQSQ |
| | | | | | | RCWSLLLCSVTEVAAPSQVVK |
| | | | | | | EAPPSFHTGTENGYQGEESLFN |
| | | | | | | KAYYGGGTNFFRKESQKLQQS |
| | | | | l | | AKKRDAELANGALGIIELNNDY |
| | | | | l | | TLKKVMKPLITSNTVTDEIERA |
| | | | | | | NVFKMNGKWYLFTDSRGSKM |
| | | | | | | TIDENKIPRNPTYKGREGPLQGE |
| | | | | | | LQTTAQGNKRGYKQMEEHSM |
| | | | | | | LMDRKNQYRENGLTAQA\PQPP |
| İ | | | | l | | PSGI*GYTAPCFPWENLI |
| 5692 | 36060 | В | 5738 | 1 | 873 | |

| SEQ ID | | | SEQ ID NO: | | | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------------------|---------------------------|--|
| NO: | of peptide | hod | in USSN | Incation of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 5693 | 36061 | A | 5739 | 274 | 716 | QACYIYTTEYYAAIKNDEF/TVL |
| | i | | | | \ | CRDMDEAGNHHSQQTVTRTKN |
| | 1 | 1 | | | | OTPHVLTHRWELNNENTWTOE |
| | | | i | | | GEHHTPGPVMLDSAPPTLGHOT |
| | | | | | | PGSSAFGLWDLHQRLRLPRPOT |
| | | | | | | KGSTVGFPGSEAFKLGLGHYW |
| | | | | | | LSFFPSLQTAYRGTLPFNH |
| 5694 | 36062 | В | 5740 | 134 | 2283 | |
| 5695 | 36063 | А | 5741 | 3 | 872 | |
| 5696 | 36064 | A | 5742 | 1 | 480 | SKLNSGDGCWSGARRGSAHSR |
| | | | | | | SPLPSPLRPRAKMATEGLHENE |
| | | | | | | TLASLKSEAESLKGKLEEERAK |
| | | | | | | LHDVELHQVAERV/VGPGAVC |
| | İ | l | | | | HEDQKDPQRPREQSPVHGLVQ |
| | | | | | | R*EEDRELVTGWEGDRVGFLH |
| | | l | | | | HKQGARGHHALHVGDGMCLC |
| | | ı | | | | PIGMCHCLWWFG |
| 5697 | 36065 | Α | 5743 | 3 | 387 | AKMATEGLHENETLASLKSEA |
| | | l | | İ | 1 | ESLKGKLEEERAKLHDVELHQ |
| | | 1 | | | 1 | VAERV/VGPGAVCHEDQKDPQ |
| | | l | | • | | RPREQSPVHGLVQR*EEDRELV |
| | | l | | | | TGWEGDRVGFLHHKQDPDSER |
| | | | | | | RWHMCPVGRGERAAAAELPRT |
| 5698 | 36066 | Α | 5744 | 1 | 1575 | |
| 5699 | 36067 | Α | 5745 | 20 | 510 | |
| 5700 | 36068 | Α | 5746 | 1 | 1392 | |
| 5701 | 36069 | A | 5747 | 1 | 1560 | |
| 5702 | 36070 | Α | 5748 | 3 | 325 | |
| 5703 | 36071 | С | 5749 | 206 | 409 | |
| 5704 | 36072 | A | 5750 | 1 | 855 | |
| 5705 | 36073 | С | 5751 | 233 | 571 | |
| 5706 | 36074 | A | 5752 | 1 | 3600 | |
| 5707 | 36075 | A | 5753 | 1 | 4137 | |
| 5708 | 36076 | A | 5754 | 3 | 1357 | |
| 5709 | 36077 | A | 5755 | 3 | 194 | |
| 5710 | 36078 | A | 5756 | 3 | 269 | |
| 5711 | 36079 | A | 5757 | 1 | 1770 | |
| 5712 | 36080 | Α | 5758 | 164 | 411 | RKNRKPNTAFLTHK WELNNEN |
| | | | | | | TWTQGGNITHQG\CWGVQG*R |
| | | l | | 1 | | RDSIRRNT*CKCRVPGCSKPPW |
| | | 1 | 1 | | | HVYTYVTNLHILHMYPRT |

| NO: of peptide sequence hod in USSN 09/540,217 location of first sequence cudon for last sequence 5713 36081 A 5759 1 3095 | st amino acid *-Stop codon,/-possible nucleotide deletion, \(\tilde{\text{postible}} \) nucleotide insertion) MKMADAKQKRNEQL\(\tilde{\text{RWIGS}} \) ETDLEPPVVKRQKTKVKFDDG AVFLAACSSGDTDEVLLLHR GADDNYANVDGLTALHOACID |
|--|--|
| sequence | MKMADAKQKRNEQLKRWIGS ETDLEPPVVKRQKTKVKFDDG AVFLAACSSGDTDEVLKLLHR |
| | ETDLEPPVVKRQKTKVKFDDG AVFLAACSSGDTDEVLKLLHR |
| 5713 36081 A 5759 1 3095 | ETDLEPPVVKRQKTKVKFDDG AVFLAACSSGDTDEVLKLLHR |
| | ETDLEPPVVKRQKTKVKFDDG AVFLAACSSGDTDEVLKLLHR |
| | AVFLAACSSGDTDEVLKLLHR |
| | |
| | |
| | DNVDMVKFLVENGANINOPDN |
| | EGWIPLHAAASCGYLDIAEFLIG |
| | OGAHVGAVNSEGDTPLDIAEEE |
| | AMEELLONEVNROGVDIEAAR |
| | KEERIMLRDAROWLNSGHIN |
| | DVRHAKSGGTALHVAAAKGY |
| | |
| | TEVLKLLIQAGYDVNIKDYDG |
| 5714 36082 A 5760 1 591 | WTPLHAAAHWGKEEACRILVD |
| 5714 36082 A 5760 1 591 | FTVTRCYAVAQEGTYFDGSGY |
| | AALVKEGYKVQSDVNITLEVS |
| | N\PRRNGVFLGISTAIVHAIGLEL |
| | VDGKVLFHVNNGAGRITAAYE |
| | PKTATVLCDGKWHTLQANKSK |
| | HRITLIVDGNAVGAESPHTQSTS |
| | VDTNNPIYVGGYPAGVKQKCL |
| | RSQTSFRGCLRKLALIKSPQVQS |
| | FDFSRAFELHGVFLHSCPGTES |
| 5715 36083 A 5761 340 739 | |
| 5716 36084 A 5762 1234 1897 | |
| 5717 36085 A 5763 1 4070 | VTPRAAWLGLGFRGSAVLGLC |
| | WQPRSPPSRAAGMMNRTTPDQ |
| | ELVPASEPVWERPWSVEEIRRS |
| | SQSWSLAADAGLLQFLQEFSQQ |
| | TISRTHEIKKQVDGLIRETKATD |
| | CRLHNVFNDFLMLSNTQFIENR |
| | VYDEEVEEPVLKAEAEKTEQE |
| | KTREQKEVDLIPKVQEAVNYG |
| | LQVLDSAFEQLDIKAGNSDSEE |
| | DDANGRVELILEPKDLYIDRPLP |
| | YLIGSKLFMEQEDVGLGELSSE |
| | EGSVGSDRGSIVDTE |
| 5718 36086 A 5764 1 972 | |

677

| SEQ ID | SEO ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amine acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 5719 | 36087 | IA | 5765 | 11 | 2193 | MVPYSLLVTWLQKALGVROY |
| 3717 | 30007 | ſ^ | 3,03 | ľ | 2173 | HVASVLCORAKVAMRPFEPKY |
| | | 1 | į. | | | IHYDLLEKNINIVCK*LNRPLTL |
| | | 1 | | | | SEKIVYRHPDDPTSOEIERGGTY |
| | | 1 | | | | LOOWPDSVTMQD/ATAQMAM |
| | | 1 | | | | LQFISSRL/SKVTMPSTIHCDHLI |
| | | | | | Į. | EAQLGSEKDLHQAKDINHEVY |
| | | 1 | | | | NFLATGSVKYGLSFWKPGSGII |
| | | 1 | | | | HOILENYEYPGVLLIGTDSHTP |
| | | | | | | NGGSLGGICIGVGGA/DAVDVM |
| | | | | | | TGIPWELKCPKVIGVKLMGSLS |
| | | | | | | GWTSPKDVILKVAGILTMKGG |
| | | | | | | TGAIVEYHGPVVDSISCTGMVT |
| | | | | | | VCNMGLEIGTTTSVFHYNLRM |
| | | 1 | | 1 | | KKYMSKTCOADIANLADEFKD |
| | | ı | | 1 | | HLVPDPGCHYDQLIEVNPSELK |
| | | l | | l | | LHINGPFTPDLAHPVAEVGKVA |
| | | | | | | EKEEWPLDI*VGLWGSCTNSSY |
| | | l | | | | EDMGCSAGVAKQALAHGLKC |
| | | 1 | | | | KSQFTITPCSEQIRASIEQDGYA |
| | | 1 | | | | QTLRDVGGIVLANACGPCIGQL |
| | | | | | | HRKDINKQEKNIIVTSYNRNFM |
| | | l l | | 1 | | GHNDTNPETHAFITSPETVTAL |
| | | | | | | AIVGTLKFNPETNYLTGKDGKK |
| | | l | | | | FKLEAPDADELPQAEFGPGQDT |
| | | | | | | YQHP\PWGTTDHISAAGP*LKFF |
| | | | | l | | GHLDTISNNLLSGAINIENGKAN |
| | | 1 | | | | SVHDAVTHEFGPFPDTARYKK |
| | | | | | | YGISWVVIGD*NYGKGSSWEH |
| | | 1 | | | | AALEPRHL\GGRAIITKSFARIHE |
| | | ı | | | | TNLRROGLLPLTFADPADNKIH |
| | | 1 | | | | LVDKLTIQSLKDLT/PGKPLKYI |
| 5720 | 36088 | В | 5766 | 3 | 1205 | DVDADTIQUELED III GIR DATI |
| 5721 | 36089 | A | 5767 | 435 | 1428 | |
| 5722 | 36090 | A | 5768 | I | 615 | |
| 5723 | 36091 | Ā | 5769 | 79 | 381 | DKPQPHLQHTRTSKRLNRSSQA |
| 3723 | 50071 | ľ | 5.00 | l' - | 501 | FLONLLPOELATSAGNLAIRPR |
| | | | | | | NACSLGFLVSRVPSLAATPRAP |
| | | | | | | WNSGPRLSD*LLPRSSRLSS*RL |
| | ļ | | | | | TLPDRLGSPVDH |
| 5724 | 36092 | A | 5770 | 38 | 452 | TEL EXCEPTION |
| 5725 | 36093 | A | 5771 | 435 | 524 | |
| 5726 | 36094 | A | 5772 | 284 | 411 | |
| 5727 | 36095 | A | 5773 | i i | 354 | |
| 5728 | 36096 | В | 5774 | I | 942 | |
| 5729 | 36097 | Α | 5775 | 1 | 417 | |
| 5730 | 36098 | A | 5776 | 88 | 279 | EDLGRSQSESLGPEFQG*VVAIE |
| | | 1 | | 1 | 1 | TIWPTEPKIFTICLSGSHSQSPW |
| | | 1 | | 1 | | NSGPRLSD*LLPRSSQLSS*RLT |
| | 1 | 1 | 1 | 1 | 1 | LPNRLRSLQDHHRCSR |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | | Amino acid sequence (X=Unknown, |
|--------|------------------------|-----|-----------------------|--|--|---|
| NO: | of peptide sequence | hod | in USSN 09/540,217 | location of first codon for peptide sequence | codon for last amino acid of peptide sequence | *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
| 5731 | 36099 | A | 5777 | 206 | 816 | FIDSMLSPSRYQ*LSSQNWKKL |
| 3731 | 150077 | ľ | 3,,,, | 200 | | L*ISYGTKNEPA*PKQS*AORTK |
| | | l | | | | LEASH*LTSNCTTSLH*SKQHGT |
| | | | | | | GTKTEKKT*AIPFRT*AWAKTS* |
| | | l | | | | LKHQKQWQQKPK*TKKIKYLG |
| | | l | | | | IQLTTDVKDLFKENYKPLLNEI |
| | | 1 | | | | KEDTNKWKNIPCSWIGGINIMK |
| | ŀ | l | | | | MAILPKVIYRFNALPIKIPMTFF |
| | , | I | | | | TELEKTTLNFIWNQKRARIAKTI |
| | į. | ì | | | | LSTKNKAGGITLADFKLYYKPT |
| | | | | | | LVKTAWYWYQNREENLGNTIQ |
| | | i | | | | DIGMGKNFMTKTPKAMATKA |
| l | | | | | | KIDKRDLIKPKSFCIAKETTIRM |
| | | l l | | | | NRQPTEWEKLFAIYPSDKALIS |
| | | | | | | GIYKDLKQIYKKKNNPIKKWA |
| | | | | | | KEMNRHFSKEDIYAANRHVKN |
| | | _ | | | | AHHHWSSEKCKSKPQ |
| 5732 | 36100 | A | 5778 | 502 | 600 | |
| 5733 | 36101 | Α | 5779 | 51 | 452 | ADKQLQQSLRIQNQCTKITSILI |
| | | l | | | | HQQQTNREPNHE*TPIHNCFKE |
| l | 1 | 1 | | | | NKIPRNPTYKGCEGPLQGELQT |
| | | l | | | | TAQGNKKGYKQMEEHSMLMG |
| 1 | | | | | | RKNQYRENGHTAQELEKTKVH MEPKKSPHRQVNPKPKEQSWR |
| | | 1 | | | | HHTT |
| 5734 | 36102 | A | 5780 | 381 | 528 | LPPPLPAGLC**DOOONSNAPLI |
| 3/34 | 30102 | l^ | 3780 | 361 | 328 | H*EKERPPDDSYRIFLPRYHFHD |
| | | | | | | DRI |
| 5735 | 36103 | Α | 5781 | I | 477 | |
| 5736 | 36104 | Α | 5782 | 180 | 496 | TPIHNCYKENKIPGNPTYKGCE |
| | | | | | 1 | GPLQGELQTTAQ*NKRGQKQM |
| | | | | | | EEHSMLMDRKNKYHEN/EPYSP |
| 1 | ł | | | | 1 | R*FIDSMPSPSNYQ*LSSQNWK |
| | | | | | | KLL*GPYGTKKEPT*PRQS |
| 5737 | 36105 | Α | 5783 | 1 | 533 | MGPEICTSDKLSDEADVTVLEV |
| | | l | | | | LARAIRQEKEIKGIQLGKEEVKL |
| ŀ | | | | | | SLFADDMIVYLENPIVSAQNLL |
| | İ | ĺ | | | | KLISNFSKVSGYKINVQKSQAF |
| | | | | | | LYTNNRQTESQIMSELPFTIASK |
| | | | | | | RIKYLGIQLTRDVKDLFKENYK |
| | | l | | | | PLLKEIKEEHSIKWKNIPSSWVG |
| | | | | | | RISIMKTAILPKVYIRIKDDEWN |
| | 1 | | | | 1 | IYRRYTEFRSLHHKLQNKYPQV |
| | 1 | | | | 1 | RAYNFPPKKAIGNKEAVLCHG |
| | 1 | | | | 1 | R*HDCISRKPHRLSPKSP*ADKQ |
| | 1 | | | | [| LQQSLRIQNQCAKITSILIYQ*QT |
| | 1 | | | | I | NREPNHE*TPIHNCFKENKIPRN |
| | 1 | | | | | PTYKGCEGPLQGELQTTAQGN |
| | | | | | | KRGTFHQMEEHSILMGRKNQY |
| L | l | | | | L | HENGHTAQGLHPDKRR |

| SEQ ID | SEQ ID NO: | | SEQ ID NO: | | Nuclcotide location of last | Amino acid sequence (X-Unknown, |
|--------|------------------------|-----|-----------------------|--|--|--|
| NO: | of peptide sequence | hod | in USSN 09/540,217 | location of first codon for peptide sequence | codon for last amino acid of peptide sequence | *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
| 5738 | 36106 | A | 5784 | 599 | 870 | TPANQQHYRRMTLQLKENQTN RKRQQKQHQQKRPHKNPIQRS ATSKIKGDGSIQP*MLPWGQSP QKALTLATAPEQRKDTPPVRGL SLQD |
| 5739 | 36107 | С | 5785 | I | 1170 | |
| 5740 | 36108 | A | 5786 | 317 | 960 | IKWPYCPROFIDSMPSPSSYQRL SSQNWKKLL'SSYGTKKEPTSP SQS*AKRTKLEASRYLTSNYTT RLQ*PKOHGTGTKTEI*INGTQO SPQK*OPBYTYNYLIFINKPEKK QWGKDSLFNKWDMDEVGNIH SQQTITRTGNQTPHYFTHRWEL NNEITWTQGAGHHTPGPVVGL GAGRGIALREIPNANDELMVQQ TNMAHIYLGKPARCADV |
| 5741 | 36109 | Α | 5787 | 903 | 1050 | LPPPLPAGLC**DQQQNSNAPLI H*EKERPPDDSYRIFLPRYHFHD DRI |
| 5742 | 36110 | A | 5788 | 281 | 491 | SFGYIPSNGMAGSNGISSSRSLR NRHTDFHNG*TSLQSHQQCKSV PISPHPLQHLLFPDFLMIAILTGV R |
| 5743 | 36111 | Α | 5789 | 1 | 381 | |
| 5744 | 36112 | Α | 5790 | 1 | 3231 | |
| 5745 | 36113 | A | 5791 | 1312 | 1463 | KGSATCSPPQANATTTTALQML GGIPWGNACGIFTRPPPQTYLN THLSTR*RPLLLLLKCVR*KGSA TCSPPQANATTTTALQMLGGIP WGNACGIFTRPPPQTYLNTHLS TR |
| 5746 | 36114 | Α | 5792 | 811 | 1065 | IS*VSFMSITH:*WKKEQQLLG CWLA*M*SMLICV*RERI*THKL E*LIILCI*RMKKILEIQKGMFKL LPY*TKRIMLK/TLNRQLNSTVS SLISRVDSLEKSNTKLIEELAIA KNNIIKLQEENHQLRSENKLIL MKTQOHLEVTKYDVETELQTY KHSRQGLDEMYNEARRQLRDE SQLRQDVENELAVQVSMKHEI ELAMKILEKDIHEKQDTLIGLR QQLEEVKAINIEMYQKLQGSED GLKEKKEIIVRLYWSALCG |
| 5747 | 36115 | Α | 5793 | 1 | 1353 | |
| 5748 | 36116 | Α | 5794 | 78 | 503 | TKELLHSKRNYHQSEQATYRM GENFCNLLI*QRANIQNLQ*TQT NLOEKNKQPHQKVGEGYQQTL LKRRHLCSQKTHEKMLIITGHQ GNTNQNIHEIPSHTS*NGDH*K VRKKQGHG*SWKPSFSANYRK DKKPNTSCSHSQ |

| SEQ ID NO: | of peptide | hod | SEQ ID NO: in USSN | location of first | Nucleotide location of last codon for last amino acid | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide |
|---------------|----------------|-----|-----------------------|-------------------------------|--|---|
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 5749 | 36117 | Α | 5795 | 2 | 200 | YGLMIRTIPVDPTIRTTSVSLTV |
| | | | | İ | | RLATMNPRSRPAPVDT\APGPP |
| | | | | | | HLHKNQKSSQHSQYLDLTSYC |
| 5750 | 36118 | Α | 5796 | 76 | 195 | |
| 5751 | 36119 | A | 5797 | 1 | 2445 | |
| 5752 | 36120 | A | 5798 | 207 | 475 | TNLQEKNKQPHQKVGKGYEQT |
| | | | | | | LLKRKHSCSQQTYEKMLIITGH |
| | | | | | | QRNANQNHNDIPSHSS*NNDH* |
| | | | | | | KDRKQQMLERM*RNRNAFTLL VGV |
| 5753 | 36121 | В | 5799 | 1 | 681 | |
| 5754 | 36122 | Α | 5800 | 1 | 798 | |
| 5755 | 36123 | С | 5801 | 78 | 245 | |
| 5756 | 36124 | Α | 5802 | 16 | 491 | EPYPDRPREPKRDPEWSWGLW |
| | | 1 | | l | | DKGGL\VLSLGRTRTEAHTALS |
| | 1 | | | | RLRASMWIDRSTRAVSVHFTLY | |
| | 1 | | | | | NPPTQLFTSVSLRVEILPTGSLV |
| | 1 | 1 | | ŀ | | PSSLVESFSIFRSDSALQYHLML |
| | | 1 | | | | PQLVFLALSLIHLCVQLYRMMD |
| | | | | l | | KGVLSYWRKPRNWLEVASLVS |
| | | | | 1 | | FSFEK |
| 5757 | 36125 | Α | 5803 | 3 | 2791 | |
| 5758 | 36126 | Α | 5804 | 219 | 392 | |
| 5759 | 36127 | Α | 5805 | 1 | 1044 | |
| 5760 | 36128 | Α | 5806 | 1 | 360 | * |
| 5761 | 36129 | Α | 5807 | 1 | 528 | |
| 5762 | 36130 | Α | 5808 | 127 | 360 | |
| 5763 | 36131 | Α | 5809 | 1 | 421 | GRRSRLAMRPLSMSYSFDLSDV |
| | | | ŀ | | | TTPESTKNLVESSMVNGGLTSQ |
| | | | ł | 1 | | TKENGLSTSQQVPAQRKKLLR |
| | | 1 | | 1 | | APTLAELDSSESEEETLHKSTSS |
| | | ı | 1 | 1 | | SSVSPSFP\EEPVL\EAVFTRKKP |
| | | | l | | | PKFLPISSTPQPERRQPPQRRHSI |
| | - | _ | | <u> </u> | | EKETP |
| 5764 | 36132 | A | 5810 | 328 | 1086 | |
| 5765 | 36133 | A | 5811 | 1 | 2076 | |
| 5766 | 36134 | A | 5812 5813 | 901 | 450 | |
| 5767 | 36135 | A | 5814 | 17 | 1506 | |
| 5768 5769 | 36136 36137 | C | 5814 | 24 | 330 | ARDQPI/PKKGTVEGFEPADNK |
| 3 /69 | 36137 | A | 3813 | 24 | 330 | CLLRATDGKKKISTVVSSKEVN |
| | | | | | | KFQMAYSNLLRANMDGLKKR |
| | 1 | | l | | | DKKNKTKKTKTSSSSSSSSSPA |
| | | | l | | | AATAATTAATTAATAAQ |
| 5770 | 36138 | A | 5816 | 1 | 2247 | AATAATTAATTAATAAQ |
| 5771 | 36138 | A | 5817 | 1 | 339 | |
| 5772 | 36140 | A | 5818 | 3 | 463 | |
| 5773 | 36140 | A | 5819 | 3 | 83 | |
| 5774 | 36141 | A | 5820 | 1 | 642 | |
| 5775 | 36142 | A | 5821 | 2 | 583 | |
| 5776 | 36144 | A | 5822 | 193 | 409 | |
| 2//0 | 20144 | I'A | 10022 | 1173 | 1707 | |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 5777 | 36145 | A | 5823 | 13 | 425 | |
| 5778 | 36146 | Α | 5824 | 1 | 450 | |
| 5779 | 36147 | В | 5825 | 82 | 2096 | |
| 5780 | 36148 | В | 5826 | 1 | 1554 | |
| 5781 | 36149 | Ā | 5827 | 129 | 522 | LCTDNIEITSKVHLHCSHHGAG |
| | | | | | | LGTCSPLCLSLPPPPWAPVOPEP |
| | | | | | | PR*APPPAPQRPVPSTIQGRKRL |
| | | ľ | | | | QLHS*SQ*DH/DAHAKVCSFTPE |
| | | | | | | PARPRTHOKEETPNTSEHOKKO |
| | | | | | | TPDTPPLRTVTLTARLHGF |
| 5782 | 36150 | Λ | 5828 | 1 | 541 | |
| 5783 | 36151 | A | 5829 | 1 | 714 | |
| 5784 | 36152 | Ā | 5830 | 188 | 287 | KELPSGGHYNCRAPSSPHPAGS |
| 5.0. | 50152 | Ι. | 1000 | 1.00 | | S*SGHQPNSQQ |
| 5785 | 36153 | A | 5831 | 71 | 689 | SPVLDDCPOGPLPSEESW/EOPV |
| 100 | 150155 | ľ. | 5051 | l'' | 1 | TROYPLRPEVHKGLONIVKHLK |
| 1 | | 1 | | | | APGLVRKCSSHCNTPILGVOKP |
| 1 | | | | | | NGQWRLVQDLRLINEAVVPLY |
| | | | | | | PVVPNPYTLLSQTPEEAEWFMV |
| | | l | | | | LDLKDAFFCIPLHSDSQFLFAFE |
| | | 1 | | | | DPTDHTSOITWMVLPOGFRDSP |
| | | | | | 1 | YLFGQALAQDLGHFSSRGTLVL |
| | | 1 | | | | QYADDLLFATSSEASCQQATLD |
| | | 1 | 1 | | | LLNFLANO |
| 5786 | 36154 | В | 5832 | 45 | 1148 | |
| 5787 | 36155 | С | 5833 | 233 | 319 | |
| 5788 | 36156 | С | 5834 | 11 | 133 | |
| 5789 | 36157 | Α | 5835 | 215 | 849 | IKRLPLMKRMWL*LQPESLEIA |
| | | 1 | | | | GILVQ*MIE*QPKKGTNSIPVSK |
| 1 | | 1 | | | l | PSP/VVQKPNGQWRQVQDLRLI |
| | | 1 | | | | SDAVIPLYPAVSNPYTLLSQILE |
| | | 1 | | | | EAEWFTVLDLKDAFFCIPLRSD |
| | | 1 | | | | SQFLLAFEDPTDHTSQLTWTVF |
| | | | | | | TQGFMDTPHLFGQSLAQDLGH |
| 1 | | ı | | | | FSSPGTLVLQYVDDLLLAKQQA |
| | | 1 | | | | TLDLLNFLANQGYKLSKLKAQ |
| 1 | | | | | | LCELLVFSSCARMHS |
| 5790 | 36158 | Α | 5836 | 1 | 449 | MNKELGISSYKFCGMGRKTSVS |
| 1 | | | | | | AAKSVSATIPISRVQGLLQVLG |
| | | 1 | | | | QEVFLLLCQDQEEQAKREKRD |
| | | 1 | | | | QRKATALAMALRQTNLGGSER |
| | | | | | | IENGAGQSPSRACYQCGLQGHF |
| | | 1 | | | | KKDYPTR/EPAAPCPLC*GNHW |
| | | L | | <u> </u> | | KMHCPRGQRSCDSHLAITHL |
| 5791 | 36159 | Α | 5837 | 1 | 723 | |
| 5792 | 36160 | Α | 5838 | 186 | 602 | |
| 5793 | 36161 | Α | 5839 | l | 843 | |
| 5794 | 36162 | В | 5840 | 1 | 1779 | |
| 5795 | 36163 | Α | 5841 | 1 | 1182 | |

| SEQ ID | ISEO ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|-------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | l | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 5796 | 36164 | Α | 5842 | 23 | 302 | LSQWKNRWTRTFLASLSVIANI |
| | | | | | \ | LEPLLNILHVAVWLMLPN*S*V |
| | | l | | | | KKQVIM\FWNWWVLGLTDFKN |
| | | | | | | EATDPRVCSWPCWLRSEAADL |
| | | 1 | | | | CGECYSS |
| 5797 | 36165 | В | 5843 | 1 | 2622 | |
| 5798 | 36166 | Α | 5844 | 279 | 1024 | |
| 5799 | 36167 | Α | 5845 | 3 | 3619 | |
| 5800 | 36168 | В | 5846 | 1 | 1898 | |
| 5801 | 36169 | Α | 5847 | 1 | 420 | |
| 5802 | 36170 | Α | 5848 | 1 | 1632 | |
| 5803 | 36171 | A | 5849 | 1 | 597 | KYLTKKTQAASVEAVKMLDEI |
| | | | | | | LLQLSASVPVDVMPGEFDPTNY |
| | l . | | | | | TLPQQPLHPCMFP/LATAYSTLQ |
| | 1 | | | | | LVTNPYQATIDGVRFLGTSGQN |
| | | | | | | VSDIFRYSSMEDHLEILE*LRVR |
| | | | | | | HISPTAPDTLGCYPFYFCGNTPS |
| | | 1 | | | | FGSKIIRGPEDQTVLLVTVPDFS |
| İ | | | | | | ATQTACLVNLRS/LACQPISFSG |
| | | | | | | FGAEDDDLGGLGWAPDSKKW |
| 5804 | 36172 | Α | 5850 | 1 | 1490 | RDAARRALNLLGLGEAVWTKO |
| | | | | l | | VRSVAMFSEQAAQRAHTLLSPF |
| | | | | | 1 | SANNATFARVPVATYTNSSQPF |
| | | | | | 1 | RLGERSFSRQYAHIYATRLIQM |
| | | | | | | RPFLENRAQQHWGSGVGVKKL |
| | | | | | | CELQPEEKCCVVGTLFKAMPL |
| 1 | | | | | | QPSILREVSEEHNLLPQPPRSKY |
| | | | | | | IHPDDELVLEDELQRIKLKGTID |
| 1 | | 1 | | | | VSKLVTGTVLAVFGSVRDDGK |
| | 1 | | | | | FLVEDYCFADLAPQKPAPPLDT |
| | 1 | | | | | DRFVLLVSGLGLGGGGGESLLC |
| l | | İ | | | į. | TQLLVDVVTGQLGDEGEQCSA |
| | | | | | | AHVSRVILAGNLLSHSTQSRDSI |
| | | | | | | NKAKYLTKKTQAASVEAVKM |
| | | | | | | LDEILLQLSASVPVDVMPGE\FD |
| 1 | | | | | | PTNYTLPQQPLHP\CMFPLATA |
| 1 | | | | | | YSTLQLVTNPYQATIDGVRFLG |
| | | 1 | 1 | | | TSGQNVSDIFRYSSMEDHLEILE |
| 1 | | 1 | | | | WTLRVRHISPTAPDTLGCYPFY |
| 1 | | l | | | | KTDPFIFPECPHVYFCGNTPSFG |
| 1 | | 1 | | | | SKIIRGPEDQTVLLVTVPDFSAT |
| 1 | 1 | 1 | | | | QTACLVNLRSLACQPISFSGFG |
| | | l _ | | | | AEDDDLGGLGLGP |
| 5805 | 36173 | В | 5851 | 13 | 441 | |
| 5806 | 36174 | Α | 5852 | 3 | 279 | |

| SEQ ID NO: | SEQ ID NO: of peptide sequence | Met hod | SEQ ID NO: in USSN 09/540,217 | Nucleotide location of first codon for peptide sequence | codon for last amino acid of peptide sequence | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
|---------------|--------------------------------------|------------|-------------------------------------|--|--|--|
| 5807 | 36175 | A | 5853 | 23 | 841 | FEKAKEPRRAEEKKKEVPAYPET LKKKI*RNFAELKIKRLRKKFA QKMLQRARRKFIHEKAKHYH KEYRQMYRTEILMAIRMARKA GNFYYPAEPKLAFVIRIGINGY SPEVRRIVLOLLRLRQIFNCNILL *SSTKASINMLRDCRSHILAWG VPQILKSVNELIYKIRGYGKINK KRIAUTDNVALIARSLGKYGIL LAWEDLIBIETYTYGKIRKEAN NFPVGPSNLSSPPRWK*KKTT HPCKKVEDAGNREGRTRSNRP YLEGMDLRCLP |
| 5808 | 36176 | С | 5854 | 57 | 287 | |
| 5809 | 36177 | Α | 5855 | 1 | 450 | |
| 5810 | 36178 | A | 5856 | 1 | 549 | |
| 5811 | 36179 | А | 5857 | 3 | 581 | EQRKIPLVPENLLKKRKAYQAL KATQAKQALLAKKEQKKGKG LRFKRLESFLDSWRQKRDKV RLFRLEVKPHALELPDKHSLAF VVNIERIDGVSILLVQRTIARIRL KKIFSGVPKVTPQNLKMI.RIV EPYVTWGFPNLKSVRELILKRG QAKVKNKTIPLTDMTVIEEHLG ECYSLGVSWGKPROSIKL |

| SEQ ID | SEQ ID NO: | | SEQ ID NO: | | | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------------------|---------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon. /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 5812 | 36180 | A | 5858 | li | 2652 | MFGRSRSWVGGGHGKTSRNIH |
| | | | | | | SLDHLKYLYHVLTKNTTVTEO |
| i | 1 | | | ł. | | NRNLLVETIRSITEILIWGDOND |
| | | | l | | | SSVFDFFLEKNMFVFFLNILROK |
| | | | | | | SGRYVCVOLLQTLNILFENISHE |
| | | | | | 1 | TSLYYLLSNNYVNSIIVHKFDFS |
| | | ı | | | | DEEIMAYYISFLKTLSLKLNNH |
| | | 1 | | | | TVHFFYNEHTNDFALYTEAIKF |
| | 1 | 1 | | | | FNHPESMVRIAVRTITLNVYKV |
| | | | | | | DNQAMLHYIRDKTAVPYFSNL |
| | | 1 | | | | VWFIGSHVIELDDCVQTDEEHR |
| | | | | | | NRGKLSDLVAEHLDHLHYLND |
| | | | | | | ILIINCEFLNDVLTDHLLNRLFLF |
| | | 1 | | | | LYVYSLENQDKVFLIIHHAPLV |
| | | l | | | | NSLAEVILNGDLSEMYAKTEQE |
| | | 1 | | | | IQRSSVLPTLSSLWQGSHLSLNQ |
| | | 1 | | | | LQSGLHKCSSHLCGAQAAADS |
| | | 1 | | | | VTGEIPAIRSLEWLISAGSKART |
| | | 1 | | | | FFFLKMLIGFWEKVDCEYQRR |
| | | l | | | | QVLSTRLQEALPSNRLTDVAAV |
| | | | | | | HSSCMLGFGSTAPRGSWIGDPA |
| | | | | | i | AVHLPLPGELAEHLGSKGTTTV |
| | | | | | | TKHQPQAKPSIRCFIKPTETLER |
| | | | | | | SLEMNKHKGKRRVQKRPNYK |
| | | | | | | NVGEEEDEEKGPTEDAQEDAE |
| | | | | | | KAKGTEGGSKGIKTSGESEEIE |
| | | | | | | MVIMERSKLSELAASTSVQEQN |
| | | | | | | TTDEEKSAAATCSESTQWSRPF |
| | | | | | | LDMVYHALDSPDDDYHALFVL |
| | | | | | | CLLYAMSHNKENLLKKRKAYQ |
| | | | | | | ALKATQAKQELLAKKEQKKGK |
| | | | | | | GLRFKLLESFLHDYWQQKPDK |
| 5813 | 36181 | A | 5859 | 1 | 405 | LEISIMAASISGYTFSAVCFHSA |
| | | | | | | NSNADHEGFLI.GEVRQEETFSIS |
| | | | | | | DSQISNTEFLQVI\KVIGWYRFR |
| | | | | | | RNTQQQMSYREQVLHKQLTRI |
| | 1 | | 1 | | | LGVPDLVFLLFSFISTANNSTHA |
| | | | | | | LEYVLFRPNRRYNQRISLAIPN |
| 5814 | 36182 | В | 5860 | 1 | 843 | |
| | | | | | | |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nuclcotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------------------|-----------------------------|--|
| NO: | of peptide | hođ | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 5815 | 36183 | A | 5861 | 3 | 1260 | EISIMAASISGYTFSAVCFHSAN |
| | | | | | | SNADHEGFLLGEVROEETFSISD |
| | | | | | | SQISNTEFLQVIQIYNHQPCSKL |
| | | | | | | FSFYDYASKVNEESLDRILKDR |
| | | | | | | RKKVIGWYRFRRNTQQQMSYR |
| | | | | | | EQVLHKQLT\RILGVPDLVFLLF |
| | | | | | | SFISTANNSTHALEYVLFRPNRR |
| | | | | | | YNQRISLAIPNLGNTSQQEYKV |
| | | | | | | SSVPNTSQSYAKVIKEHGTDFF |
| | | | | | | DKDGVMKDIRAIYQVYNALQE |
| | | | | | | KVQAVCADVEKSERVVESCQA |
| | | | | | | EVNKLRRQITQRKNEKEQERRL |
| | | | | | | QQAVLSRQMPSESLDPAFSPRM |
| l | | | | | 1 | PSSGFAAEGRSTLGDAEASDPP |
| | | | | | | PPYSDFHPNNQESTLSHSRMER |
| | | l | | | 1 | SVFMPRPQAVGSSNYASTSAGL |
| l | | | 1 | | | KYPGSGADLPPPQRAAGDSGE |
| | | | | | | DSDDSDYENLIDPTEPSNSEYSH |
| | | | | | | SKDSRPMAHPDEDPRNTQTSQI |
| 5816 | 36184 | Α | 5862 | 1 | 742 | |
| 5817 | 36185 | Α | 5863 | 1 | 3063 | MSLEVDRSVETMCSGDEILLPD |
| | | | | 1 | | LPKADVADPLWGPFPVQNCLS |
| | | | | l | | LARSDSREQGLVLVMESRNRE |
| | | | | l | | VVPPGVSYSKDGAKSLKGDVP |
| | | | | | | ASEVTSKDSTFSQFSPISSAEEC |
| | | l | | l | | GDDEKIKVDDPLTRRTCNQASG |
| | | l | | | | SAPQQDYDKLKAFGGENSSKT |
| | | 1 | | ĺ | | GLSPSGNMEKNKVVKREAEAN |
| | | 1 | | ł | | SINLSVYEPFKVRKAEDKLKEN |
| | | 1 | | | | SDNVLENRVLDGKLSSEKNDT |
| | | l | | | | CLPGTAPSKTKSSSKLSSCSSAI |
| | | L | | | | MALSAKKAASDSCKEPV |
| 5818 | 36186 | Α | 5864 | 2 | 626 | LCQHNRIKHKGIRKVYACSHCP |
| | 1 | l | | | | DSRRTFTKRLMLEKHVQLMHS |
| | | 1 | | | | LKDPDLKE/TDRCHQ*GGNRNK |
| | | l | | | | RRH/LSSPVPSGSWKNQFSR/CA |
| | | l | | | | MCGFTTENLLQFHEHIPQHKSD |
| | Į | l | | l | | SSSYQCQECGLWYTSHVSLSRH |
| | | 1 | | l | | LFIVHKLKEPQPVSKQNGAGED |
| | | | | l | 1 | NQQENKPSHEDESPNGTVSDRK |
| | | 1 | | I | 1 | CKVCVKTFETEAALNTHMRIH |
| | 1 | 1 | l | | I | GMAFIKSKRMSSAKK |

| SEO ID | SEO ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /-possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 5819 | 36187 | A | 5865 | 11 | 765 | MORDVYISHVRKEHGKOMKK |
| | | 1 | | | | QPCCORDKPFSSSHSLCWHNRI |
| | 1 | | | 1 | | KHKVIRKVYTCSHCSDSRGTFT |
| | | | | | | KOLMLEKHVOLTHGIKDPDLK |
| | | 1 | | | | E/TDRRHQ*GGNRNKRRPQGPQ |
| | 1 | | | | | SOVEVERTGSGVQASQ\GAITO |
| | | | | | | PLKKLKINVFKVHKCARA\GFT |
| | | 1 | | | | TENLLOFHEHIPOHKSDGSSYO |
| | | l | | | | CREHLFVVHKLKEPOPVSKON |
| | | | | | | GAGEDNQQENKPSHEDESPNG |
| | İ | l | | l | | AMSDRKCKVCAKTFETEAALN |
| 1 | | ļ | | | | THMOTHGMAFIKSKRMSSDEK |
| 5820 | 36188 | Α | 5866 | 878 | 1095 | AFFLDTLYTQFSRC*SRAFVPFA |
| | | | | | | HPTAMACSSRR/LIRVOEODAA |
| ļ | | | | | | QVTHQSFKDDLCVVLGDTLHH |
| İ | | l | | | | RFFLIFRH |
| 5821 | 36189 | Α | 5867 | 1 | 1137 | |
| 5822 | 36190 | Α | 5868 | 1 | 1380 | |
| 5823 | 36191 | Α | 5869 | 55 | 558 | |
| 5824 | 36192 | Α | 5870 | 1 | 897 | |
| 5825 | 36193 | Α | 5871 | 1 | 565 | |
| 5826 | 36194 | В | 5872 | 22 | 1696 | |
| 5827 | 36195 | Α | 5873 | 295 | 522 | |
| 5828 | 36196 | Α | 5874 | 3 | 3678 | IPAPVSGRPPPGLLAEGKLSGPR |
| | | l | | | | PMCRTRLGSHTAASAPARMWL |
| | - | | | | | FHTLLCIASLALLAAFNVDVAR |
| | | 1 | | | | PWLTPKGGAPFVLSSLLHQDPS |
| | | 1 | | | | TNQTWLLVTSPRTKRTPGPLHR |
| | | | | | | CSLVQDEILCHPVEHVPIPKGRH |
| | | 1 | • | | | RGVTVVRSHHGVLICIQVLVRR |
| | | 1 | | | ŀ | PHSLSSELTGTCSLLGPDLRPQA |
| | | 1 | | 1 | | QANFFDLENLLDPDARVDTGD |
| | | l | | | | CYSNKEGGGEDDVNTARQRRA |
| | | | | l | | LEKEEEDKEEEEDEEEEAGT |
| | | | | 1 | | EIAIILDGSGSID |
| 5829 | 36197 | Α | 5875 | ł | 3189 | |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------------------|---------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nuclcotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | delction, \=possible nuclcotide inscrtion) |
| | | | | | 1 | |
| 5830 | 36198 | Α | 5876 | 1119 | 2463 | LRAGGPGQGGKGPAHPGRRVD |
| | | l | | | | ELLLGHPTAVGCAKGTDCPTPT |
| | | l | | | | PGGLWV*GVQEESSDLPTAVDS |
| | | 1 | | | | SRPDIRDQAWASVHWELYVHG |
| | | | | | | SSFINT*GERGAGY/AVITW/STV |
| | | 1 | | | | VEARSMPQGTSAQKAELIAFIR |
| | | 1 | | | | ALELSEALAKTVRQRCVSCRQ |
| | | 1 | | | | HHAROGPAVPPGIQAYGAAPFE |
| | | | | | | DLQVDFTEMPKCGDIRKIVTGD |
| | | | | | | VNTPAILGVVSSSPPSHIGNNITE |
| | l . | | | | | DPELQPILAGLSLSMYLVTVLR |
| | 1 | 1 | | | | NLLIILAVSSDPHLHTPMCFFLS |
| | | l | | | | NLCWADIGFTLATVPKMIVDM |
| 1 | | | | | QSHTRVISYEGCLTRISFLVLFA | |
| | | | | l | | CIEDMLLTVMAYDCFVAICRPL |
| | 1 | | | | | HYPVIVNPHLCVFFLLVYFFLSL |
| | | 1 | | | | LDSQLHSWIVLQFTIIKNVEISN |
| 1 | | 1 | | | | FVCDPSQLLKLACSDSVINSIFM |
| | | 1 | | i | | YFHSTMFGFLPISGILLSYYKIVE |
| | | | | | | SILRISSSDGKYKAFSTCGSHLA |
| 5831 | 36199 | В | 5877 | 1 | 1830 | |
| 5832 | 36200 | С | 5878 | 109 | 245 | |
| 5833 | 36201 | В | 5879 | 1 | 801 | |
| 5834 | 36202 | В | 5880 | 171 | 288 | |
| 5835 | 36203 | В | 5881 | 49 | 502 | |
| 5836 | 36204 | В | 5882 | 1 | 639 | |
| 5837 | 36205 | Α | 5883 | ր | 821 | MSGQFDFLLWTPEEDNSDESD |
| | | 1 | | | | AEGEHGDGAEEEAPPPVPRPGP |
| | | | | | | KPAGLGRRPCPYEQAQGGDGP |
| | | | | | | EEQWMSFCWDIPRKSGAPRERI |
| | | 1 | | | | TLRRHLEDCGCKVSKKKAQICR |
| | | | | | | QQKDPQEESPAQFYERLCEAYG |
| | | | | | | MYTPFDPDSPENQRMIHMALV |
| 1 | | | | | | RQSAEDMRRKLQKQAGLAGM |
| | 1 | | | Ì | I | NPSQLLERASQVFVNRDAV/TP* |
| 1 | 1 | 1 | | Ì | 1 | GKQQREWRERG*YDSQYRRGG |
| ĺ | | l | | - | i | TQPCDIVPNIRRERR*YHSQYRR |
| | i | l | | | 1 | RARPPGPH*SERGALRPGSLPRQ |
| | | L | | | | AA*RVPSGPADGQ |
| 5838 | 36206 | Α | 5884 | 1 | 1860 | |

| SEQ ID | ISEO ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------------|----------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | coden for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | l | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | 1 | | | sequence | | |
| 5839 | 36207 | A | 5885 | 2745 | 3732 | IRIGKNYFKVHMEPKKSPHROV |
| 3037 | 50107 | ľ. | | | 3.55 | NPKPKEQSWRHHTT*LQTILQG |
| | | | | | | YSNONSMPGPTPO\PSTPAPGG |
| | | l | | | | NLRNPQSSDLLQVTKQQGQAL |
| | | | | i | | AIQREAPLHRIPAPEAIPWYFQP |
| | | 1 | | | | QPATQLGSPPVDPPSSAMM/SR |
| | | | | | | RAHRSRGPDROGYPLOGD*PGE |
| | | 1 | | | | PRPOEH*RGHSQERLPSSEKOTE |
| | ŀ | 1 | | | i | ICPPAQATOHPEEPDAHOPYKH |
| | ļ. | 1 | | ł | | LFQVCAHQGHPVAQRRN*PGY |
| | į . | 1 | | | i | WERYHSAEDPELOPILAGLSLS |
| | | 1 | | | i | MYLVTVLRNLLIS |
| 5840 | 36208 | В | 5886 | 1 | 2379 | MIEVIVERREES |
| 5841 | 36209 | В | 5887 | 1 | 6741 | |
| 5842 | 36210 | В | 5888 | 165 | 928 | |
| 5843 | 36211 | Α | 5889 | 56 | 2028 | |
| 5844 | 36212 | В | 5890 | 1335 | 3804 | |
| 5845 | 36213 | Α | 5891 | 365 | 1573 | |
| 5846 | 36214 | Α | 5892 | 1 | 1491 | |
| 5847 | 36215 | Α | 5893 | 25 | 458 | |
| 5848 | 36216 | Α | 5894 | 1 | 1194 | MGGNAADKFRAGVELALQSG |
| | | | | | | NKVCVCSPRTTISGDAVAPRSV |
| | | | | | | LPGCRHIPGEISQHSHCWAGRS |
| | | | | | | LSSRKRGSLFRRMGFIKVVKNK |
| 1 | | | | | | AYFKRYQVKFRRR\RKGKT\DY |
| 1 | ŀ | l | | | | YARKR\LVIQDKNKYNTPKY\R |
| | | l | | | | MIV\RVTNRDI\ICQMLYA/RRIE |
| 1 | | l | | | | GDMIVCAAYCTPNLPKIWV*RV |
| | | l | | | | GLTNYAAAY\CTGLLL\ARRLL |
| | | | | | | NRFGMDKIYEGQV\ELTGDEYN |
| | | | | | | VESIDGQPGAFTCYLDAGLAR\ |
| | | | | | l . | TTTGNKVFGAPEGKLWMGGLS |
| | | | | | | IPHSTK\RFPG\YDSE\SKEFNA\E |
| | | | | | | VTSGKHIMGPKCLQNYM\RYL |
| ŀ | | | | | | ME\ED\EDAYKK\QFS\QYIK\NS |
| | | | | | | VT\PDMM\EEMYK\KAHAAIRE |
| | | | | | 1 | ESSSMEKKAQGKKFKKKRWNR |
| | | | | | | P\KMSLAQKKDRVAQKKASFL |
| | | _ | | _ | | QSSRSGLLESLTPAIFP |
| 5849 | 36217 | Α | 5895 | 1 | 1191 | |
| 5850 | 36218 | Α | 5896 | 21 | 159 | PRSSVRPAGGFSSTCPPSWAAS |
| | | l | | 1 | 1 | RSCTTSHGCGHQ*CAGTGTQTR |
| 50.51 | 2/212 | Ļ. | 5007 | l | 1000 | L |
| 5851 | 36219 36220 | A | 5897 | 1 | 1062 246 | |
| 5852 5853 | | A | 5898 | 1 | 642 | |
| 5854 | 36221 36222 | A | 5900 | 2 | 648 | |
| 5855 | 36222 | A | 5900 | 1 | 555 | |
| 5856 | 36224 | В | 5902 | 151 | 513 | |
| 2020 | 150224 | 10 | 10702 | 1.~. | 12.2 | |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------------|----------------|----------------|--------------|-------------------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon fur last amino acid | *=Stop codon, /=possible nucleotide |
| - | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 5857 | 36225 | IA | 5903 | 1 | 2915 | VSLAFCOPLSLSLSPLLPLASSI. |
| 303. | JOZZZ | 1 | 3703 | ľ | | APERTHLPGPGSLLLSPPSFPAR |
| | 1 | 1 | | | | PREPRGCVTAAPPDKMDTAEE |
| | | | | ĺ | | DICRVCRSEGTPEKPLYHPCVC |
| | | | | | | TGSIKFIHQECLVQWLKHSRKE |
| | | 1 | | | | YCELCKHRFAFTPIYSPDMPSRI. |
| | 1 | | | | | PIODIFAGLVTSIGTAIRYWFHY |
| | | 1 | | | | TLVAFARWEVVLLPACRIYKCL |
| | | 1 | | | | FLGSVSSLLTLPLDMLSRKNLL |
| | 1 | 1 | | | | ADCLQGCF\VVTCTLCAFISLV |
| | | 1 | | | | WLREQIVHGGAPIWLEHAAPPF |
| | | 1 | | | | NAAGHHQNEA |
| 5858 | 36226 | A | 5904 | 3 | 907 | |
| 5859 | 36227 | В | 5905 | 102 | 406 | |
| 5860 | 36228 | В | 5906 | I | 5241 | |
| 5861 | 36229 | Α | 5907 | I | 519 | |
| 5862 | 36230 | Α | 5908 | I | 3067 | TRDAAMAEAALEAVRSELREF |
| | | 1 | | | , | PAAARELCVPLAVPYLDKPPTP |
| | l | 1 | | ļ. | } | LHFYRDWVCPNRPCIIRNALQH |
| | | | | Ì | | WPALQKWSLPYFRATVGSTEV |
| - | | 1 | | | | SVAVTPDGYADAVRGDRFMM |
| | 1 | 1 | | | | PAERRLPLSFVLDVLEGRAQHP |
| | | 1 | | | | GVLYVQKQCSNLPSELPQLLPD |
| | | 1 | | | | LESHVPWASEALGKMPDAVNF |
| | | 1 | | | | WLGEAAAVTSLHKDHYENLYC |
| | | 1 | | | | VVSGEKHFLFHPPSDRPFIPYEL |
| | | 1 | | | | YTPATYQLTEEGTFKVVDEEA |
| | | _ | | | | MEKAEVSRTCLLTVRVLQA |
| 5863 | 36231 | Α | 5909 | 1 | 429 | |
| 5864 | 36232 | Α | 5910 | I | 690 | |
| 5865 | 36233 | A | 5911 | 1 | 376 471 | |
| 5866 | 36234 | A | 5912 5913 | <u> </u> | 606 | |
| 5867 5868 | 36235 36236 | A | 5913 | 3 | 2756 | COCCUTO A ADDICTION CHICAGON C |
| 2868 | 36236 | l ^A | 5914 | 3 | 2/36 | SPGGRTPAARDSIVREVIQNSKE |
| l | 1 | 1 | | | | VLSLLQEKNPAFKPVLAIIQAG |
| | | 1 | | | | DDNLMQEINQNLAEEAGLNITH ICLPPDSSEAEIIDEILKINEDTRV |
| | | 1 | | | | |
| | | 1 | | | | HGLALQISENLFSNKVLNALKP EKDVDGVTDINLGKLVRGDAH |
| 1 | | 1 | | | | ECFVSPVAKAVIELLEKSGVNL |
| | | 1 | | | 1 | |
| İ | | 1 | | | | DGKKILVVGAHGSLEAALQCLF |
| | | 1 | | | | QRKGSMTMSIQWKTRQLQSKL HEADIVVLGSPKPEEIPLTWIOP |
| | | | | | | |
| 1 | 1 | | | | | GTTVLNCSHDFLSGKVGCGSPR IHFGGLIEED |
| 5869 | 36237 | A | 5915 | 3 | 404 | RLKEKKLVKEVIAVSCGPAQCO |
| 2869 | 36237 | A | 2912 | ľ | 404 | |
| 1 | | | | | | ETIRTALAMGADRGIHVEVPPA |
| 1 | | | | 1 | | EAERLGPLQVARV/AVVTADLR |
| 1 | | | | 1 | | LNEPCYATLPNIMKAKKKKIEV |
| l | | 1 | | | | IKPGDLGVDLTSKLSVISVEDPP |
| | | 1 | | L | | QRTAGVKVETTEDLVAKLKEIG |

| SEQ ID | | | SEQ ID NO: | | | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------------------|---------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon./=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 5870 | 36238 | A | 5916 | 1 | 334 | |
| 5871 | 36239 | Α | 5917 | 88 | 870 | MADVRVLVAVKRVIDYAVKIR |
| | ſ | | | i | | VKPDRTGVVTDGVKHSMNPFC |
| | | | | 1 | | EIAVEEAVRLKEKKLVKEVIAV |
| | | | | 1 | | SCGPAQCQETI\RTALA\MGA\D |
| | | | | | 1 | RGIHVE\VPPAEAERF/GVPLQV |
| | | ŀ | | | | ARVLGQAWQRRRRLDLVLLGK |
| | | | | | | QA\IACTDCNQ\TGQMTAGFLD |
| | 1 | | | | | WPQGTF\ASQVTLEGDKLKVER |
| | } | | , | j | | EIDGGLETLRLKLPAVVTADLR |
| | | | | | | LNEPRYA\TLP\NIMKAKKKKIE |
| | | | | | | VIKPGDLGVDLTSKLSVISVEDP |
| | | | | | | PQRTAGVKVETTEDLVAKLKEI |
| 5872 | 36240 | Α | 5918 | 1 | 774 | |
| 5873 | 36241 | Α | 5919 | 1 | 1557 | |
| 5874 | 36242 | Α | 5920 | 1 | 759 | |
| 5875 | 36243 | Α | 5921 | 305 | 638 | |
| 5876 | 36244 | Α | 5922 | 364 | 540 | |
| 5877 | 36245 | Α | 5923 | 9 | 111 | |
| 5878 | 36246 | Α | 5924 | 1 | 594 | |
| 5879 | 36247 | Α | 5925 | 169 | 594 | |
| 5880 | 36248 | Α | 5926 | 37 | 936 | |
| 5881 | 36249 | В | 5927 | 91 | 2043 | |

691

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | | Amino acid sequence (X=Unknown, |
|--------|------------|---------|------------|-------------------|---------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | l | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 5882 | 36250 | Α | 5928 | TI . | 2298 | MSRKGPRAEVCADCSAPDPGW |
| | i | | | | | ASISRGVLVCDECCSVHRSLGR |
| | | l | l | | l | HISIVKHLRHSAWPPTLLOMVH |
| | | l | | | l | TLASNGANSIWEHSLLDPAOVO |
| | | | | | | SGRRKANPQDKVHPIKSEFIRA |
| | | | l | | | KYQMLAFVHKLSCRD\DDGVT |
| | | ŀ | | | | AKDL\SKAN*HSSVR\TGKPWK |
| | | 1 | | | | TCLRLLS\LGA\QANFFHPEKGT |
| | | 1 | l | | | TPLHVAAKAGQTLQAEL\LVVY |
| | | 1 | | | 1 | GADPGSPDVNGRTPIDYA\ROA |
| | | ı | | | 1 | GHHELAERLVEC\QYE\LTERLA |
| | | l | | | | FYLCGRKPDHKNGHYIIPOMAD |
| | | 1 | | | | SLDLSELAKAAKKKLQALSNRL |
| | | 1 | | | | FEELAMDVYDEVDRRENDAV |
| | | 1 | | | | WLATQNHSTLVTERSAVPFLPV |
| | | | | | | NPEYSATRNQGRQKLARFNAR |
| | | Į. | | | | EFATLIIDILSEAKRRQQGKSLSS |
| | 1 | 1 | | | | PTDNLELSLRSQSDLDDQHDYD |
| | | 1 | | | | SVASDEDTDQEPLRSTGATRSN |
| | | 1 | | | | RARSMDSSDLSDGAVTLQEYL |
| | | 1 | | | | ELKKALATSEAKVQQLMKVNS |
| | | | | | | SLSDELRRLQREIHKLQAENLQ |
| | | 1 | 1 | | | LRQPPGPVPTPPLPSERAEHTPM |
| | | 1 | | | | APGGSTHRRDRQAFSMYEPGS |
| | | 1 | | | | ALKPFGGPPGDELTTRLQPFHS |
| | | i | | | | TELEDDAIYSVHVPAGLYRIRK |
| | | 1 | | | | GVSASAVPFTPSSPLLSCSQEGS |
| | | 1 | 1 | | | RHTSKLSRHGSGADSDYENTQS |
| | | 1 | | | | GDPLLGLEGKRFLELGKEEDFH |
| | | 1 | | | | PELESLDGDLDPGLPSTEDVILK |
| | | 1 | | | | TEQVTKNIQELLRAAQEFKHDS |
| | | 1 | | | | FVPCSEKIHLAVTEMASLFPKRP |
| 5883 | 36251 | Α | 5929 | 1 | 924 | |
| 5884 | 36252 | Α | 5930 | 214 | 387 | RRAFHPTPVTSARSTLHSFGQL |
| 1 | | | | | | RLPHSM*SGGTLLISMMQANQS |
| | | | | | | LSLEFSKWTSFPLD |
| 5885 | 36253 | Α | 5931 | I | 1639 | |
| 5886 | 36254 | Α | 5932 | 1 | 1098 | |
| 5887 | 36255 | A | 5933 | 1 | 546 | NSSQVLQF*YLWVNEAPFRLLT |
| | | 1 | | | | MPQPYPQINITADQLWGSVAVL |
| | | | 1 | | ŀ | V*MH\NGLPGLCI*AWEKTTSG |
| 1 | | 1 | ŀ | | | GEQYPSSSAIKQGPKEPYADFIA |
| | | 1 | 1 | | | RLQESLKKVIADLAAQDIVLWL |
| | 1 | 1 | 1 | | | LAFDNANPECQAALRPIRGKAH |
| | 1 | 1 | | | | LVDYTKVCDGIRDKLHKATLL |
| | 1 | 1 | | 1 | | AQAMAGLRMGKGNTPFPGACF |
| L | | <u></u> | | | | NCGKHGH |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|--------------|----------|------------|-------------------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 5888 | 36256 | A | 5934 | Ti | 1648 | MGQVWGLVHFTLEVFHTGDEF |
| 5000 | 50250 | ľ. | 555. | ľ | | EOEYSEVTEDVTEHVYLPAKA |
| | l | | | | | KVAKEEEAGIOOAROEGDLEA |
| | Į. | 1 | | | | WOFPVRIHPPDOOENITATFEPF |
| | | 1 | | | | PFKLLKELKOAINOYGPGSPFV |
| | | l | | | | MGLLKNVTVSSQMIPTDGDPLT |
| | | 1 | | | | RACLTPAQFLQFKTWWADEAS |
| | | | | | | IQAARNAWAQPQINITADQLLG |
| | | i | | | | VGGWAGLDAQFVMQDDAIEQ |
| | | | | | | LRGVCIRAREK\IT*CGEQYPSF |
| 5889 | 36257 | A | 5935 | 120 | 254 | |
| 5890 | 36258 | С | 5936 | 366 | 479 | |
| 5891 | 36259 | Α | 5937 | 1 | 933 | |
| 5892 | 36260 | Α | 5938 | 1 | 840 | MGKVWGLVHSTLELFHTDVEE |
| | | ľ | | | | EGEYNEVTEEVTKHVYLPAKA |
| 1 | 1 | | | | | KAAKEGEVHPYHSAPPHYYFE |
| l | 1 | 1 | | | | ENDPPDLSFLEDTGTPRLAAAA |
| | 1 | | | | | TTKANA\KQPLLLSPSMHR/PLP |
| l | l | | | | | TRPLLAG\QATALPQGV*PLIAP |
| | | 1 | | | | PTRPHLEHCSTQ*RPQPAPTLGE |
| | | | | | | ITPVTVPQAPLHPRAVQPW/HST |
| | | | | | | PTRSWLQAVMPGIAPPSRSPPW |
| | | | | | | AVQLRILTYLGCLSTTPAAVQS |
| | | | | | | LSQPPASVRQARVPQAPASSLC |
| | | 1 | | | I | QEKPPSPPPVAPHGAAAAARPP |
| | | | | | | SYHSSCASVAVVAANVLIG |
| 5893 | 36261 | Α | 5939 | I | 134 | MGQVW*KSQSPKA*EPGVSCP |
| | | | | | | RAGRREASVPRWYSS |
| 5894 | 36262 | Α | 5940 | I | 1158 | |
| 5895 | 36263 | Α | 5941 | ı | 673 | MGIALGSPTTGPKAMKQNLSIG |
| | İ | | | | | PAGILLPQPVMTPGCPAAAPPV |
| | 1 | | | | | APRCGYVLSEDAWGNLQGLCT |
| | | | | | | GLSCGQPVAPWATDSGGAQDP |
| | | 1 | | | | VALLPPFPSRGLLGPSCMQRSQ |
| ļ | 1 | | | | | VVKGGRQSEISSQNKKVIADLA |
| | | | | | | AQDIVLQLLAFDNANPDCQAA |
| | | | Í | | | LRPIRGKAHLVDFIKACDVIGGI |
| 1 | | | | | | PNLLLHPRGLRAITIAVFGKQ\IR |
| | 1 | | | | 1 | TSGSNPLRSTFLSRSRSISKNCSA |
| | | <u> </u> | | ļ | | EV |
| 5896 | 36264 | Α_ | 5942 | 1 | 1182 | 1 |

| SEQ ID | SEO ID NO. | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|------------|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| ŀ | | | | sequence | | |
| | | | | | | |
| 5897 | 36265 | A | 5943 | 1056 | 2128 | TQPPTWGQIKKLSQMVEENLR |
| | | | | | | KAGQLVTMNNLMVAMIVVITT |
| | | | ľ | ŀ | | TEEQEYSEVTEEVTEQVYLPAK |
| | | | | | | AKVAKEGEVHPYPSAPPHYYFE |
| | | | | | | EKEWPDPPDLSFLEDTRQKVVA |
| | | | | | | PVTVRAAPRATVLSSIQAGIQQ |
| | | | | | | AR*EGDLEAWQFPVRIHPPDQQ |
| 1 | | | | | | GNIIVTFEPFPFKLFKEFKQAVN |
| | | | | | | QYGPGSPFVMGLLKNVAVSSW |
| 1 | | | | | | MIPTDWDALTRACLTPAQFLQF |
| | | | l . | | | KTCAMKQGPREPYVDFIARLQE |
| 1 | | | | | | SLKKMIADSAAQEIVLQLLAFD |
| | | | | | | NAHPDCQAALRPIRGKAHLVD |
| | | 1 | ł | | | YVKACDGIGEYTPSTYEKKVN |
| | | | ļ | | | CKTASCRSFRRYPEEGIVITGDD |
| | | | | | | SSMRVVVPEDLPVGQDVEVED |
| | | | | | | RDIDDPDPV |
| 5898 | 36266 | A | 5944 | 1 | 300 | RESIDES EST |
| 5899 | 36267 | A | 5945 | 1 | 373 | |
| 5900 | 36268 | A | 5946 | 1 | 2976 | |
| 5901 | 36269 | A | 5947 | 287 | 544 | |
| | | | | | | |
| 5902 | 36270 | A | 5948 | 831 | 4555 | |
| 5903 | 36271 | C | 5949 | 108 | 434 | |
| 5904 | 36272 | C | 5950 | 145 | 402 | |
| 5905 | 36273 | A | 5951 | 3 | 1104 | GSRPGGHTLQSHRGRHAQGLR |
| | | | | | | SPLLAPVCLGCGTWGQRRLFW |
| | | | l | 1 | | SLKI*RLLCWF/CRRLQINCKNK |
| | 1 | | | | | PAIPRGPT/GPSEKSGLLLQDQG |
| | İ | | | | | DTTNTEEENSKSLENIFGRVIKE |
| | | | | | | NFQSLVRDLDI\QYKKHKEHPG |
| | | | | | | NSSQKDHHLGTLSSGYPKLRQR |
| | | | ŀ | | | KES*ELSDRSTRKISQS/YNLYTP |
| | | | l | | | NTGAPRFIKQLLTDLRNEIDSNT |
| | | | | | | IIVGYFSTPLTALDRSSRQKVND |
| | | | | | | ETVDLNYTLEQMDLTEIYRTFH |
| | | | | | | PTTTEYTFYSTVHGTFSKIDHMI |
| | | | | | | CHKMSLNEFKKTEIISSTLSDHS |
| | | | | | | GIKLEINSKMNLONHANTWKL |
| | | 1 | | | | NNLLLNEHWVKNEIKMEIEKFF |
| | | 1 | | | | KLNDSNDTTYONLWDMAKAV |
| | | | | | | LRGKFIALNTYIKKMM |
| 5906 | 36274 | В | 5952 | 1 | 2367 | EKGKI IALITI TIKKIVIVI |
| 5907 | 36275 | A | 5953 | 21 | 132 | WREGAROCOEDPAEFLSD*DW |
| 3907 | 302/3 | <u>۱</u> ^ | 2223 | | 132 | ADPGPPHNAPGQNWH |
| 5000 | 26276 | - | 5954 | | 1471 | ADIGITANATOQNWH |
| 5908 | 36276 | A | 3734 | ı | 1461 | L |

| SEO ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------------|----------------|-----|--------------|-------------------|-----------------------------|---|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | 1 | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 5909 | 36277 | A | 5955 | 31 | 1802 | SAWWNSRELLDPOSRSRSGFCF |
| | | | | 1 | | *EYPPTSGTEOESVSGNRALCSS |
| | ŀ | l | | i | | LRMNGDQNSDVYAQEKODFV |
| ŀ | | 1 | | ŀ | | OHFSOIVRVLTEDEMGHPEIGD |
| | | | | | | AIARLKEVLEYNAIGGKYNRGI |
| | | l | | | | TVVVAFRELVEPRKQDADSLO |
| | l | l | | | | RAWTVGWCVELLQAFFLVAD |
| | l | l | | | | DIMDSSLTRRGOICWYOKPGV |
| | ľ | ı | | | | GLDAINDANLLEACIYRLLKLY |
| | ŀ | | | | | CREOPYYLNLIELFLOSSYOIEI |
| 1 | ľ | ı | | | | GADPGPPHSPPRAMWILSDSLK |
| | | l | | | | RGTNLLSSTRQLSTPSTFL |
| 5910 | 36278 | A | 5956 | | 532 | RUNEAEQKYKDIQDKLQIISEET |
| 3910 | 30278 | Ι^ | 3930 | l' | 332 | |
| | | ı | | | | NARAPECMALKADVVAKKRA |
| ŀ | | 1 | | | | YNEAEVLYNRSLNEYKALKKD |
| İ | | l | | | | DEQLCKRIEELKK/RVLTN/RLE |
| Ì | | 1 | | | | PERLERQKKISWLKERVKAFQN |
| ļ | | l | | | | QENSVNQEIEQFQQALEKDKEE |
| ŀ | | 1 | | | | HGKIKREKLDVKHALSYNQRL |
| | l | 1 | | | | LKELKDSKTDRLKRFGPNVPAL |
| | | | | | | LEAIDD |
| 5911 | 36279 | A | 5957 | 121 | 475 | |
| 5912 | 36280 | A | 5958 5959 | 131 | 2891 3101 | |
| 5913 | 36281 | A | | I31 | 292 | CORURNII I LOOM OND VILLED |
| 5914 | 36282 | A | 5960 | 44 | 292 | CQDYRWLLASSVLCWLY*KTQ |
| | Ì | ı | | | | QSDTEDLLCSAPTGPPNPEEDD |
| | | | | 1 | | GKS*PEKCRQMT*KKWSINCKC |
| | ŀ | | | I | | |
| | | | | | *** | FFASSHNTTLSIGLFLR |
| 5915 | 36283 | В | 5961 | 26 | 239 | FFASSHNTTLSIGLFLR |
| 5915 5916 | 36283 36284 | B | 5961 5962 | 26 131 | 239 3121 | FFASSHNTTLSIGLFLR LVSFLLFQDALPEGDASPLGPY |
| | | _ | | | | FFASSHNTTLSIGLFLR LVSFLLFQDALPEGDASPLGPY LLPSGAPERGSPGKEHPEERVV |
| | | _ | | | | FFASSHNTTLSIGLFLR LVSFLLFQDALPEGDASPLGPY LLPSGAPERGSPGKEHPEERVV TAPPSSSQSAEVLGELVLDGTA |
| | | _ | | | | FFASSHNTTLSIGLFLR LVSFLLFQDALPEGDASPLGPY LLPSGAPERGSPGKEHPEERVV TAPPSSSQSAEVLGELVLDGTA PSAHHDIPALSPLLPEEARPKHA |
| | | _ | | | | FFASSHNTTLSIGLFLR LVSFLLFQDALPEGDASPLGPY LLPSGAPERGSPGKEHPEERVV TAPPSSSQSAEVLGELVLDGTA PSAHHDIPALSPLLPEEARPKHA LPPKKKLPSLKQVNSARKQLRP |
| | | _ | | | | FFASSHNTTLSIGLFLR LVSFLLFQDALPEGDASPLGPY LLPSGAPERGSPGKEHPEERVV TAPPSSSQSAEVLGELVLDGTA PSAHHDIPALSPLLPEEARPKHA LPPKKKLPSLKQVNSARKQUNSARKQUK KATSAATVQRAGSQPASQGLD |
| | | _ | | | | FFASSHNTTLSIGLFLR LVSFLLFQDALPEGDASPLGPY LLPSGAPERGSPGKEHPEERVV TAPPSSSQSAEVLGELVLDGTA PSAHHDIPALSPLLPEEARPKHA LPPKKKLPSLKQVNSARKQLRP KATSAATVQRAGSQPASQGLD LLSSSTEKPGPPGDPDPIVASEE |
| | | _ | | | | FFASSHNTTLSIGLFLR LVSFLLFQDALPEGDASPLGPY LLPSGAFERGSPGKEHPEERVY TAPPSSSQSAEVLGELVLDGTA PSAHDIPALSPLLPEEARPKHIA PSAHDIPALSPLLPEEARPKHIA KATSAATVQRAGSQPASQGLD LLSSTIEKFGPFGDPIPVASEE ASEVPLWLDRKESAVPTTPAPL |
| | | _ | | | | FFASSHNTTLSIGLFLR LVSFLLFQDALPEGDASPLGPY LLPSGAFERGSPGKEHPEERVV APPSSSQSAEVLGELVLDGTA PSAHHDIPALSPLLPEEARPKHA LPPKKKLPSLKQVNSARQGLP KATSAATVQRAGSQPASQGLD LLSSSTEKPGPPGDPDPVASE ASEVPLWLDRKESAVPTTPAPL QISPFTSQPYVAHTLPQRPEPGE |
| | | _ | | | | FFASSHNTTLSIGLFLR LVSFLLFQDALPEGDASPLGPY LLPSGAPERGSPGKEHPEERVV TAPPSSSQSAEVLGELVLDGTA PSAHHDIPALSPLLPEEARPKHA LPPKKKLPSLKQVNSARKQLRP KATSAATVQRAGSQPASQGLD LLSSSTEKPGPPGDPDPIVASEE ASEVPLWLDRKESAVPTTPAPL QISPFTSQPYVAHTLPQRPEPGE PGPDMAQEAPQEDTSPMALMD |
| | | _ | | | | FFASSHNTTLSIGLFLR LVSFLLFQDALPEGDASPLGPY LLPSGAPERGSPGKEHPEERVV TAPPSSSQSAEVLGELVLDGTA PSAHDIPALSPLLPEEARPKHA LPFKKKLPSLKQVNSARKQLRP KATSAATVQRAGSQPASQGLD LLSSSTEKPGPPGDPDIVASEE ASEVPLWLDRKESAVPTTPAPL QISPFTSQPYVAHTLPQRPEPGE PGPDMAQEAPQEDTSPMALMD KGENELTGSASEESQETTISTHIT |
| 5916 | 36284 | _ | 5962 | 131 | 3121 | FFASSHNTTLSIGLFLR LVSFLLFQDALPEGDASPLGPY LLPSGAPERGSPGKEHPEERVV TAPPSSSQSAEVLGELVLDGTA PSAHHDIPALSPLLPEEARPKHA LPPKKKLPSLKQVNSARKQLRP KATSAATVQRAGSQPASQGLD LLSSSTEKPGPPGDPDPIVASEE ASEVPLWLDRKESAVPTTPAPL QISPFTSQPYVAHTLPQRPEPGE PGPDMAQEAPQEDTSPMALMD |
| 5916 | 36284 36285 | A | 5962 5963 | 131 | 3121 | FFASSHNTTLSIGLFLR LVSFLLFQDALPEGDASPLGPY LLPSGAPERGSPGKEHPEERVV TAPPSSSQSAEVLGELVLDGTA PSAHDIPALSPLLPEEARPKIL PSKKLFLSKQVNSARKQLRP KATSAATVQRAGSQPASQGLD LLSSSTEKPGPFGDPDIVASEE ASEVPLWLDRKESAVPTITAPL QISPFTSOPYVAHTLPORPEPGE POPDMAQEAPQEDTSPMALMD KGENELTGSASEESQETTISTIII TTVITTEQAP |
| 5916 | 36284 | A | 5962 | 131 | 3121 | FFASSHNTTLSIGLFLR LVSFLLFQDALPEGDASPLGPY LLPSGAFERGSPGKEHPEERVV APPSSSQSAEVLGELVLDGTA PSAHHDIPALSPLLPEEARPKHA LPPKKKLPSLKQVNSARKQLLP KATSAATVQRAGSQPASQGLD LLSSSTEKPGPPGDPDIVASE ASEVPLWLDRKESAVPTTPAPL QISPFTSQPYVAHTLPQRPEPGE PGPDMAQEAPQEDTSPMALMD KGENELTGSASEESQETTISTIII TTVITTEQAP PSVVLDINVSFNHWSAIFLTMEN |
| 5916 | 36284 36285 | A | 5962 5963 | 131 | 3121 | FFASSHNTTLSIGLFLR LVSFLLFQDALPEGDASPLGPY LLPSGAPERGSPGKEHPEERVV TAPPSSSQASEVLGELVLDGTA PSAHDDIPALSPLLPEEARPKHA LPPKKKLPSLKQVNSARKQLRP KATSAATVORAGSQPASQGLD LLSSSTEKPGPPGDPDPIVASEE ASEVPLWLDRKESAVPTTPAPL USPFTSGPYVAHTLPGREPGE PGPDMAQEAPOEDTSPMALMD KGENELTGSASEESQETTISTHIT TTVTITEQAP PSVVLDINVSFNHWSAIFLTME\ PPCHRVRSHAMESR*GSVLP*N |
| 5916 | 36284 36285 | A | 5962 5963 | 131 | 3121 | FFASSHNTTLSIGLFLR LVSFLLFQDALPEGDASPLGPY LLPSGAFERGSPGKEHPEERVV APPSSSQSAEVLGELVLDGTA PSAHHDIPALSPLLPEEARPKHA LPPKKKLPSLKQVNSARKQLLP KATSAATVQRAGSQPASQGLD LLSSSTEKPGPPGDPDIVASE ASEVPLWLDRKESAVPTTPAPL QISPFTSQPYVAHTLPQRPEPGE PGPDMAQEAPQEDTSPMALMD KGENELTGSASEESQETTISTIII TTVITTEQAP PSVVLDINVSFNHWSAIFLTMEN |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------------|------------|----------|------------|-------------------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /-possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | 1 | <u> </u> | ļ | | Land | Anna de Constantino di I |
| 5920 | 36288 | Α | 5966 | 3 | 688 | GTSAGDGCPHPHTVLWPPDIMF |
| | 1 | 1 | | | | PKKDVPVKKPAGPSISKPAAKP |
| | 1 | | | | | AAAGAPPAKTKAEPAVPQAPQ |
| | 1 | | | | Į. | KTQEPPVDLSKVVIEFNKDQLE |
| | | | | 1 | | EFKEAFELFDRVGDGKILYSQC |
| | 1 | | | | | GDVMRALGQNPTNAEVLKVLC |
| | 1 | | l | | | NPKSDEMNVKVLDFEHFLPML |
| | | | | 1 | | QTVAKNKDQGTYEDYVEGLRV |
| | | | | | | FDKEGNGTVMGAEIRHVLVTL |
| | | | 1 | Ì | | GEKMTEEEVEMLVAGHEDSNG |
| ŀ | | | | | | CINY\EELVRMVLNG |
| 5921 | 36289 | A | 5967 | 54 | 540 | AVYMCDLTENOTADLIPST\EF |
| | | | | | | KEA\FQLFDRTGDGKILYSQCG |
| ł | | 1 | | | | DVMRALGONPTNAEVLKVLGN |
| | | | | Į. | | PKSDEMNVKVLDFEHFLP\MLQ |
| l | | | | | | TVAKNKDOGTYEDYVEGLRVF |
| | | | | | | DKEGNGTVMGAEIRHVLVTLG |
| | | | | | | EKMTE\EDVHMLVAGHEDSNG |
| | | | | | | CINYEAFVRHILSG |
| 5922 | 36290 | A | 5968 | 1 | 405 | CHAILM VIGILESS |
| 5923 | 36291 | A | 5969 | 93 | 506 | |
| 5924 | 36292 | В | 5970 | 43 | 615 | |
| 5925 | 36293 | A | 5971 | 2 | 598 | TRTSLHAALFSWDPVGTSLETFI |
| 3723 | 30273 | , | 3771 | [| 370 | SHLEVKKGMLVGIVGKVGCGK |
| | | | | | | SSLLAAIAGELHRWEOVOCGG |
| | | | | | | HTLH*APEQMLRGHVAVRGLS |
| | | | | | | KGFGLATQEPWIQFATIRDNILF |
| | | | | | | |
| | | | | | | GKTFDAQLYKEVLEACALNDD |
| | | 1 | | | | LSILPAGDQTEVGEKGVTLSGG |
| | | | | | | QRARIALARAVYQEKELYLLD |
| | 0.000 | | | | | DPLAAVDADVANPPACTGCNP |
| 5926 5927 | 36294 | В | 5972 | 137 | 371 1398 | |
| | 36295 | A | 5974 | 1 | 915 | |
| 5928 | 36296 | A | | 1 | | |
| 5929 | 36297 | A | 5975 | 40 | 564 | |
| 5930 | 36298 | A | 5976 | 62 | 280 | |
| 5931 | 36299 | A | 5977 | 17 | 744 | |
| 5932 | 36300 | Α | 5978 | 1 | 537 | |
| 5933 | 36301 | A | 5979 | 242 | 576 | AANSLYKGSNSAALIILVGP*IS |
| | 1 | | | | | CLTHPVYMK*APS*TICLLYSM |
| | | | | | | VILKALFFPQNINFIFLPVKSRHS |
| 5934 | 36302 | Α | 5980 | 924 | 3473 | |
| 5935 | 36303 | Α | 5981 | 1 | 604 | |
| 5936 | 36304 | A | 5982 | 288 | 732 | RNCIANYDFLILPTSF*WCSFFV |
| l | | 1 | 1 | 1 | | LLFLFLSLSLSSLKLHSDLDKGE |
| | 1 | 1 | | 1 | | GTAKYTLSGDGAGP\VFTIDETT |
| | 1 | 1 | l | 1 | | GD\IHAIRSL\DREEKPFYTLR\A |
| | 1 | 1 | | 1 | | Q\AVDIETRKPLEPESEF\IIKVQ |
| | 1 | 1 | | | | DINDNEPKFWGWDLMVATGP |
| 1 | 1 | 1 | 1 | | | QKWSPVG*VGQIKIL |
| 5937 | 36305 | A | 5983 | 1 | 1510 | |
| | | | | | | |

| SEQ ID NO: | SEQ ID NO: of peptide sequence | Met hod | SEQ ID NO: in USSN 09/540,217 | Nucleotide location of first codon for peptide sequence | Nucleotide location of last codon for last amino acid of peptide sequence | Amino acid sequence (X=Unknown, *-Stop codon, /-possible nucleotide deletion, \-possible nucleotide insertion) |
|---------------|--------------------------------------|------------|-------------------------------------|--|---|---|
| 5938 | 36306 | Α | 5984 | 1 | 603 | |
| 5939 | 36307 | Α | 5985 | 250 | 505 | GFSPTWQ*MNTHPSLMCFSPSR TTGSAAAN*RGQQKSGVPFWS* SHVKGKDQIPVPICPCTTAPVT MESTCIC*PTHVSCKTLMV |
| 5940 | 36308 | Α | 5986 | 3 | 131 | RVLVPDIRGAI*AVPKSPSIKSYF ALPRALFLLPPYPDDLGI |
| 5941 | 36309 | Α | 5987 | 1 | 913 | |
| 5942 | 36310 | Α | 5988 | 5 | 177 | |
| 5943 | 36311 | Α | 5989 | 3 | 383 | |
| 5944 | 36312 | A | 5990 | 1 | 1323 | |
| 5945 | 36313 | Α | 5991 | 342 | 594 | |
| 5946 | 36314 | Α | 5992 | ı | 321 | |
| 5947 | 36315 | Α | 5993 | 3 | 601 | |
| 5948 | 36316 | Α | 5994 | 1 | 1023 | |
| 5949 | 36317 | Α | 5995 | 1 | 606 | |
| 5950 | 36318 | Α | 5996 |] | 1536 | |
| 5951 | 36319 | Α | 5997 | 2 | 1394 | |
| 5952 | 36320 | Α | 5998 | 371 | 1045 | |
| 5953 | 36321 | Α | 5999 | 3 | 360 | |
| 5954 | 36322 | Α | 6000 | l | 636 | |
| 5955 | 36323 | С | 6001 | 1 | 861 | |
| 5956 | 36324 | Α | 6002 | 1 | 711 | |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|--------------|------------|-------------------|-----------------------------|--|
| NO: | of peptide | | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | l | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 5957 | 126226 | - | 10002 | 110 | 2446 | AGSPPRADAAAGLWERGHLLS |
| 5957 | 36325 | Α | 6003 | 18 | 2446 | |
| | | l | | | | AAVAAMGKRDRADRDKKKSR |
| l | | l | | | | KRHYEDEEDDEEDAPGNDPQE |
| i | | l | | | | AVPSAAGKQVDESGTKVDEYG |
| | | | | | | AKDYRLQMPLKDDHTSRPLWV |
| | l | l l | | | | APDGHIFLEAFSPVYKYAQDFL |
| | 1 | l | | | | VAIAEPVCRPTHVHEYKLTAYS |
| | | | | | | LYAAVSVGLQTSDITEYLRKLS |
| | | 1 | | | | KTGVPDGIMQFIKLCTVSYGKV |
| | | 1 | | | | KLVLKHNRYFVESCHPDVIQHL |
| | | l | | i | | LQDPVIRECRLRNSEGEATELIT |
| | | l | | | | ETFTSKSAISKTAESSGGPSTSR |
| i | | l | | | | VTDPQGKSDIPMDLFDFYEQM |
| | | | | | | DKDEEEEEETQTVSFEVKQEMI |
| | | 1 | | | | EELQKRCIHLEYPLLAEYDFRN |
| | | 1 | | | | DSVNP\DINIDLKPTAV\LRPYQE |
| | | | | | | KSLR\KMFGNGRARSGVIVLPC |
| | | l | | | | GAGKSLVGVTAACTVRKRCLV |
| 1 | | | | | | LGNSAVSVEQWKAQFKMWSTI |
| 1 | İ | | | | | DDSQICRFTSDAKDKPIGCSVAI |
| | | ı | | | | STYSMLGHTTKRSWEAERVME |
| | | 1 | | | | WLKTQEWGLMILDEVHTIPAK |
| l | ŀ | | | | | MFRRVLTIVQAHCKLGLTATLV |
| l | | 1 | | | | REDDKIVDLNFLIGPKLYEANW |
| | | 1 | | | | MELQNNGYIAKVQCAEVWCP |
| l | | 1 | | | | MSPEFYREYVAIKTKKRILLYT |
| 1 | | | | | | MNPNKFRACQFLIKFHERRNDK |
| 1 | | 1 | | | | IIVFADNVFALKEYAIRLNKPYI |
| | | | | | | YGPTSQGERMQILQNFKHNPKI |
| 1 | | | | | | NTIFISKVGDTSFDLPEANVLIQI |
| | | | 1 | | 1 | SSHGGSRRQEAQRLGRVLRAK |
| | | l | | | | KGMVAEEYNAFFYSLVSQDTQ |
| 5958 | 36326 | Α | 6004 | 1 | 933 | |
| 5959 | 36327 | A | 6005 |] | 879 | |
| 5960 | 36328 | Α | 6006 | 1 | 727 | |
| 5961 | 36329 | A | 6007 | 1 | 1509 | |
| 5962 | 36330 | Α | 6008 | 1 | 1698 | |

| SEQ ID NO: | SEQ ID NO: of peptide sequence | | SEQ ID NO: in USSN 09/540,217 | Nucleotide location of first codon for peptide sequence | | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
|---------------|--------------------------------------|---|-------------------------------------|--|------|---|
| 5963 | 36331 | A | 6009 | 2465 | 2751 | VPTSSAPMPWPSRQWERSSRT MTVISSSQLMALCPP*TAQVLA AAPA*LGASSAARGIPPQAGKT QKIETDIATMQLCANKLDKKDF FGKSDPFLYFYRSNEDGTFTICH KTEVYKNTLNPVWQPFSIPVRA LCNGDYDRTVKIDVYDWDRD GSHIDFIGEFTSYRELSKAQNQ FTVYEVLNPRKKCKKKKYVNS GTVTLLSESVDSEFTFVDYIKGG TUQLNFTVAIDFTASNGETRIMSE KVGGNPLQPTSLHY MSPYQLS AYAMALKAVGEHQDYDSDKL FPAYGFGAKLPPEGRISHQPLIN NNDEDPNCAGIEGVLESYFQSL |
| 5964 | 36332 | Α | 6010 | 1 | 1059 | |
| 5965 | 36333 | Α | 6011 | 255 | 405 | |
| 5966 | 36334 | Α | 6012 | 251 | 1199 | |
| 5967 | 36335 | Α | 6013 | 1 | 1791 | |
| 5968 | 36336 | Α | 6014 | 335 | 984 | |
| 5969 | 36337 | A | 6015 | 1 | 127 | LPLRLSYEIYLYFTF*KPEHNKS HFLESHLIRNTRSALNTRK |
| 5970 | 36338 | Α | 6016 | 1 | 774 | |

699

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 1 | | | | sequence | | |
| 5971 | 36339 | ĪΑ | 6017 | 186 | 2699 | PRGAKPAVPAGPERPGPGPGPC |
| 1277 | 30337 | ľ. | 0017 | 1.00 | 2077 | SPRPMVLPTCPMAEFALPRHSA |
| | 1 | | | | | VMERLRRRIELCRRHHSTCEAR |
| | 1 | | | l | | YEAVSPERLELERQHTFALHOR |
| | | 1 | | | | CIOAKAKRAGKHROPPAATAP |
| | 1 | 1 | | l | | APAAPAPRLDAADGPEHGRPA |
| | | | | l | | THLHDTVKRNLDSATSPONGD |
| | | | | | | QQNGYGDLFPGHKKTRREAPL |
| | | l | | l | | GVAISSNGLPPASPLGQSDKPSG |
| | | | | | | ADALQSSGKHSLGLDSLNKKR |
| | | ŀ | | | | LADSSLHLNGGSNPSESFPLSLN |
| | | ŀ | | | | KELKQEPVEDLPCMITGTVGSIS |
| | | ľ | | | | QSNLMPDLNLNEQEWKELIEEL |
| | | | | | | NRSVPDEDMKDLFNEDFEEKK |
| | | i | | | | DPESSGSATQTPLAQDINIKTEF |
| | i | | | | | SPAAFEQEQLGSPQVRAGSAGQ |
| | 1 | 1 | | | | TFLGPSSAPVSTDSPSLGGSQTL |
| | 1 | 1 | | | | FHTSGOPRADNPSPNLMPASAO |
| | | 1 | | | | |
| | 1 | 1 | | | | AQNAQRALAGVVLPSQGPGGA |
| | | 1 | | | | SELSSAHQLQQIAAKQKREQML |
| | | | | | | QNPQQATPAPAPGQMSTWQQT |
| | | | | | | GPSHSSLDVPYPMEKPASPSSY |
| | | | | | | KQDFTNSKL/PHDA*CE*EFPSA |
| | ŀ | | | | | RRPLPPAQPCEPAESPATE*LES |
| | | | | | | ELRE/YTRGLCW\IRQYKTPFSL |
| | | | | | | QSGLWARQPGVWPEQASPDGL |
| | į. | | | | | SSPAAVPYKSRAELPVSDEAKA |
| | | | | | | RKYAFPITGSTWPGAEPFQCPC |
| | | | | | | ASPGYQCWDPAACRVRGQLPQ |
| | | | | | | QLPLSQQPATGRCNEAASVAFG |
| | | | | | | PTETKGAAAKAFTATAVPSEAT |
| | | | | | | APSRGTGEATVSAPSDPPTTPVP |
| 5972 | 36340 | Α | 6018 | 1 | 1062 | |
| 5973 | 36341 | Α | 6019 | 3 | 566 | ASRPPVTLRLVVPASQCGSLIG |
| - | | | | | | KGGCKIKEIRESTGAQVQVAGD |
| | | | | | | MLPNSTERAITIA GIPQSIIECVK |
| 1 | | | | | | QICVVMLESPPKGVTIPYRPKPS |
| | | | | | İ | SSPVIFAGGQAYTIQGQYAIPQP |
| | | | | | | DLTKLHQL\AMQQC\HFPMTHG |
| | | | | | | \NTGFQWALES\SFPEV\KGYW\ |
| 1 | | 1 | | | | AGLDASAQTTSHELTIPNDLIGC |
| | | | | | | IIGRQGAKIN |
| 5974 | 36342 | Α | 6020 | 2 | 531 | TLRSSWQVVRTGTAQAATVRG |
| | | 1 | İ | | 1 | FPPHPPRP\SASTLTLEGPPLEAY |
| | 1 | | l | | 1 | TIQGQYAIPQPDLTKLHQL\AM |
| | | 1 | 1 | 1 | 1 | QQSHFPMH/GDGIHSDYSAG\LD |
| 1 | | 1 | | | l | ASA\QTTSH\ELTISKRILIGLA*S |
| | | | | | ŀ | GRSRAPKINGGSRQMSGAQI\KI |
| | | | 1 | 1 | | ANPV\EGSTD*GRFTITGSAASIS |
| | | 1 | | 1 | | LAQYLINVRLSSETGGMGSS |
| | | Ь. | L | | L | 2.10.2 |

| SEO ID | SEO ID NO: | Mot | SEO ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|----------|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| İ | | 1 | | sequence | | |
| | | <u> </u> | | 1.00 | 1369 | DI VILLE DE LA CALLACTA DE LA CALLAC |
| 5975 | 36343 | A | 6021 | 181 | 1369 | PLKVQLPRTLLDMDTGVIEGGL |
| | | | | | | NVTLTIRLLMHGKEVGSII\GKK |
| | | | | | İ | GESVKKMREESGARI\NISEGNC |
| 1 | | 1 | | | | PERII\TLAGTH*LPSFKAFAMI\I |
| | | 1 | | | | DKLGRRDISSSM\TNSTAAQLGF |
| 1 | | l | | 1 | | PVTLKLG\APAS\QCGSLIGKGG |
| | | l | | | į. | CKIKEIRESTGAQVQVAGDMLP |
| | [| 1 | | 1 | 1 | N\STEAGHHYLLGIPQSII\ECV\K |
| | | l | | 1 | | QILRGSCWETLFPSSPPKGVTIP\ |
| | | | | | | YRPK\PSSSPV\IF\AGGPGQVPA |
| | | | | | | QAATVRAFPTPPRPCGSTLTWE |
| | | l | | | | GPPLEAYTIQGQYAIPQPD\LTK |
| | | | | | | L\HQL\AMQQSHFPMTHGNTGF |
| | 1 | | | | | SG\IESSF\PEVKGYW\AGL\DAS |
| | | | | | | AOTTSHELTI\PNGFDWAGIIGA |
| | | 1 | | | 1 | FKGAKIN\EIROMSGAQIKIANP |
| | | 1 | | | | VE\GSTDRQVTITGSAASISLAQ |
| | 1 | | | 1 | | YLINVRLSSETG\GMGNN |
| 5976 | 36344 | A | 6022 | 1 | 690 | T DATE THE COURT OF THE COURT O |
| 5977 | 36345 | A | 6023 | li - | 399 | |
| 5978 | 36346 | A | 6024 | 3 | 397 | |
| 5979 | 36347 | A | 6025 | 3 | 249 | |
| 5980 | 36348 | A | 6026 | 1177 | 477 | |
| 5981 | 36349 | A | 6027 | 49 | 451 | |
| 5982 | 36350 | A | 6028 | 1 | 1305 | |
| 5983 | 36351 | A | 6029 | 1 | 568 | |
| 5984 | 36352 | A | 6030 | 207 | 1053 | PLTFGPARWRETPPSLYKEFSG |
| | | 1 | | | | LFGSFFLSSAWGAHNLRALFLL |
| | | | | | | LPSSRIQPTPWVFGDLKSPAGL |
| | | | | | | OVLNDYLADKSYIEGYVPSOA\ |
| | ł | | | | | DVAVFEAVSSPPPADLCHALR |
| | | ŀ | 1 | | | WYNHIKSYEK\EKASLPGVKKA |
| 1 | | | | | 1 | LGKYGPADVEDTTGSGATDSK |
| | | | | | | DDDDIDLFGSDDEE\ESEKPKRL |
| | | | | l | | REERLAQYESKKAKKPG\LVA |
| | | ł | l | | | KSSILLLVKP\WD\DETDMAKLE |
| | | | | | | |
| | | 1 | | | | ECVRSIQADGLVWGSSKL\VPV |
| | | | | | | GYGIKKLQIQCVVEDDKVGTD |
| | | _ | | | | MLEEQITAFEDYVQSMDVAAF |
| 5985 | 36353 | A | 6031 | 1 | 211 | |
| 5986 | 36354 | Α | 6032 | 27 | 241 | EVFGSWWQVPHEWLGSVLVV |
| | 1 | 1 | 1 | I | l | MSEFLFH*LM*ELVLKRV*CLS |
| | 1 | l | | 1 | | HLSLAPFLAM*YACSSSSPSTMI |
| | | | | | | VSFFFF |
| 5987 | 36355 | Α | 6033 | 1 | 588 | |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| | 0.000 | Ļ | 1000 | 1000 | Linna | LIFCGCWLFASLTVMEAAHFFE |
| 5988 | 36356 | A | 6034 | 279 | 1333 | |
| | | 1 | | | | GTEKLLEVWFSRQQPDANQGS |
| | į. | | i | | | GDLRTIPRSEWDILLKDVQCSII |
| | | 1 | | | | SVTKTDKQEAYVLSESSMFVSK |
| | | 1 | | | | RRFILKTCGTTLLLKALVPLLKL |
| | | 1 | l | | | ARDYSGFDSIQSFFYSRKNFMK |
| | 1 | 1 | | | | PSHQGYPHRNFQEEIEFLNA1FP |
| | | | | | | NGAGYCMGRMNSDCWYLYTL |
| 1 | | 1 | | | | DFPEER\VISQPDQTLEILMSELD |
| ļ | | 1 | l | | | PAVMDQF*HEDG\VTAKDVTRE |
| | | 1 | 1 | | | SGIRDLIPGSVIDATMF\NPCGYS |
| | | | | | | MNGMKS\DGTYWT\IHITPEPEF |
| | | | | | | SYVSFETNLSOTSYDDLIRKVV |
| | | | 1 | | | EVFKPGKFVTTLFVNQSSKCRT |
| | | l | | | | RLGLPQK\IEGFKR\LDCQEGWF |
| | | 1 | | | | KDSNFFF\TSFAKKQQQQQS |
| 5989 | 36357 | A | 6035 | 1 | 687 | - months and a second s |
| 5990 | 36358 | A | 6036 | i | 894 | |
| 5991 | 36359 | В | 6037 | 1 | 1458 | |
| 5992 | 36360 | Ā | 6038 | 1 | 1062 | |
| 5993 | 36361 | A | 6039 | 1 | 1218 | |
| 5994 | 36362 | Α | 6040 | 277 | 3508 | RSGRIAWAQEMDAAGRGCHLL |
| | 1 | | i e | | | PLPAARGPARAPAAAAAAAAS |
| | | | | | | PPGPCSGAACAPSAAAGAGAM |
| ŀ | | 1 | | | | NPSSSAGEEKGATGGSSSSGSG |
| | | | | | | AGSCCLGAEGGADPRGAGSAA |
| | | | | | | AAGAAALDEPAAAGOKEKDEA |
| | | l | | | | LEEKLRNLTFRKQVSYRKAISR |
| | | 1 | | | | AGLOHLAPAHPLSLPVANGPA |
| | | 1 | | | | KEPRATLDWSENAVNGEHLWL |
| 1 | | | | | | ETNVSG\DLCYLGEENCQVRFA |
| | İ | 1 | | | | KSALRRKCAVCKIVV/HTTACIE |
| 1 | | 1 | | | | ELEKINFRCKPTFREG\GS |
| 5995 | 36363 | A | 6041 | 45 | 155 | ELEKINFRCKF I FREG (G3 |
| 5996 | 36364 | A | 6042 | 1 | 979 | |
| 5997 | 36365 | A | 6043 | 3 | 1042 | |
| 5998 | 36366 | A | 6044 | 2 | 401 | |
| 5998 | 36367 | | 6045 | 1 | 5772 | |
| 6000 | 36368 | A | 6046 | 16 | 5678 | VTSGRLLFYFRSMGPGCDLLLR |
| 6000 | 36368 | A | 6046 | 16 | 3678 | |
| | | | | | | TAATITAAAIMSDTDSDEDSAG |
| | | 1 | l | | | GGPFSLAGFLFGNINGAGQLEG |
| | | l | | | | ESVLDDECKKHLAGLGALGLG |
| | | 1 | | | | SLITELTANEELTGTDGALVND |
| | | | | | 1 | EGWVRSTEDAVDYSDINEVAE |
| 1 | 1 | 1 | | | 1 | DESRRYQQTMGSLQPLCHSDY |
| | | | i | | 1 | DEDDYDADCEDIDCKLMPPPPP |
| | 1 | 1 | 1 | 1 | I | PPGPMKKDKDQDSITGEKVDFS |
| | | 1 | | | 1 | SSSDSESEMGPQEATQAESEDG |
| | 1 | 1 | 1 | 1 | I | KLTLPLAGIMQHDATKLLPSVT |
| | | | | | 1 | ELFPEFRPGKVLRFLR |
| 6001 | 36369 | Α | 6047 | l | 354 | |
| | | | | | | |

| SEQ ID NO: | SEQ ID NO: of peptide sequence | | SEQ ID NO: in USSN 09/540,217 | Nucleotide location of first codon for peptide sequence | Nucleotide location of last codon for last amino acid of peptide sequence | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
|---------------|--------------------------------------|---|-------------------------------------|--|---|---|
| 6002 | 36370 | Α | 6048 | I | 666 | |
| 6003 | 36371 | Α | 6049 | 129 | 456 | TYPAVGESSRRPERSRGVPGPD AAAESHFRPGRISNPLHRAGEQ GHARAEGSGVFRPHRGRGLRL LFVQAPDQVDAPVHG*VAPPAI GARDAQTCRSHECPRTRPLDEV |
| 6004 | 36372 | A | 6050 | 1 | 1095 | |
| 6005 | 36373 | Α | 6051 | 171 | 619 | |
| 6006 | 36374 | Α | 6052 | 1 | 621 | |
| 6007 | 36375 | В | 6053 | 1 | 181 | |
| 6008 | 36376 | Α | 6054 | 1 | 905 | |
| 6009 | 36377 | Α | 6055 | 1 | 855 | |
| 6010 | 36378 | Α | 6056 | 2 | 244 | |
| 6012 | 36380 | A | 6058 | 133 | 5421 | FGKLYAWTVONILNVLMDASK KFKELGIQPVPLQTITSENPLGP SLGSIPQARFLLMMLSMLTLQF SANNLDLLLNSGTLALTQTALF LIVLPDVELLIPOHLL-MOSTL LPVLALLLAQHRSFGPSCDNVE EDMNASAQGASATVLEATRKE VMRGVDWKWGDVGEAEQTER NIHPTTMMFTSTINLLQTLCLP/ RVHAEIMQSEATKTLCGLLQIL VESGTTDKTRME |
| 0.012 | 33300 | ^ | | | , | FFTGONCRNNEKVTLVRIADLE NHNNDGGFWTVIDGKVYDIKC FQTQSLTENSILAQFAGEDPVV ALEAALQFEDTRESMHAFCVG QYLEPDQEGVTIPLGSLSSPLI DTERNLGLLLGLHASYLAMSTI LSPVEIECAKWVQSSIFSGGLQI SQHHYRYNEEKDEDHCSSPGGT PASKSRLCSHRRALGDHSQAFL QAIADNNIQDHNVKDFLCQIER YCKOCHLTPIMF |

| SEQ ID NO: | SEQ ID NO: of peptide sequence | Mct hod | SEQ ID NO: in USSN 09/540,217 | Nuclcotide location of first codon for peptide | Nucleotide location of last codon for last amino acid of peptide sequence | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
|---------------|--------------------------------------|------------|-------------------------------------|--|---|---|
| | | | | sequence | | , , |
| 6013 | 36381 | A | 6059 | 1 | 2607 | MMGHSSAIPLTATPGELKGOSP |
| 0015 | 50501 | | 000, | ľ | | TKMPDPELGCQGAKSQGCSRN |
| | | | | | | ARHOKARSMPLQDQHLALAIL |
| | | | | | | LELAVORGTLSOMLSAILLLLO |
| | | | | | | LWDSRAQETDNERSAQGTSTL |
| | | | l | | | LLSLLQTFQSIICSKDTPPSEGN |
| 1 | | | ĺ | 1 | | MHLLSGPLSPSESFLRESFFTVO |
| | | | l | | | NCRNNEEVTLICKADLENHNK |
| | | | | | | DGGFWIVIDEKVYDIKDFOTOS |
| | | | l | l | | LTGNSILAQFAGENPVVALEAA |
| | | | | l | | FEFEVTRESMHAFCVGQYLEVR |
| | | | | l | | LYALSDAEDGRG\TL*WLOSSIF |
| l | | | | | | SG/GLQTSQIHYSYNEEKDEDH |
| 1 | | | | I | | CS/SPVGTPASKSR\CSHRWALG |
| | | | | | | DHSOAFLOAIADNNIODHNVKT |
| | | | | 1 | | HOEOGRSYKEVCTPVIERLRFL |
| | 1 | | | | | SNELRPAVGNDLSIISEFKLLSSL |
| | | | | | | PRWRRIAOKIIRERRKKRIPKKP |
| | | | | | | ESTADEEKIGNEESDLEEACILP |
| | | | | | | HSPINVDKRPIAIKSPKTITSENP |
| | | | | | | LGPSLGSIPQARFLLMMLSMLT |
| | | l | | l | | LOHSANNLDLLLNSGTLALTOT |
| | | | | | | ALRLIGPSCDNVEEDMNASAQ |
| | | | | l | | GVSATVLEATRKETAPVHLPVS |
| | | | | | | GPELAATMKIGTRVMRGVDW |
| | | | | l | | KWGDQDGPPPGLGRVIGELGE |
| ļ. | | | İ | İ | | DGWIRVQWGTGSTNSYRMGK |
| | | | | | 1 | EGKYDLKLAELPAAAQPSAEDS |
| | | | | l | | DTEDDSASPNRLVYREQHRSW |
| | | | | l | | CMLGFVRSIALTPQVCGALSSP |
| | | | | 1 | | OWITLLMKVMKGHAPFPAASL |
| 1 | | | | l | | QRQRWVAVSLPHALVKSGTVP |
| 6014 | 36382 | A | 6060 | 1 | 7297 | QUQUE TITTE STREET TO STREET |
| 6015 | 36383 | A | 6061 | 32 | 259 | SLRVTPGGRNVSEKKDRKKTG |
| 10015 | 33303 | ľ. | "" | l | [· | R/PPELERKSHTERLYLEEGSAE |
| | | | | | | PA*VGRRAPESVNDRGGAIQRA |
| | | | | | | QRGQPAPPLPR |
| 6016 | 36384 | A | 6062 | 3 | 437 | QROQUALTER |
| 6017 | 36385 | A | 6063 | 1 | 425 | MTELPTLWKPLKNSPMFRVIAR |
| 10017 | 33303 | <u> </u> | 0005 | l. | 1 | AFCVTFILVSTHOEMLTITSENP |
| | | | | | | LGPSLGSIPQARFLLMMLSMLT |
| | | | | | | LOHSANNLDLLLNSGTLALTOT |
| | | | | | | ALRLIGGTPVELPAELAAPAFR |
| | | | 1 | l | | AAAA/VDKNPRRRGOKVAVAK |
| | | | 1 | l | | SGGDRGKKSR |
| | | L | L | | | BOODROKKSK |

| SEO ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 6018 | 36386 | Α | 6064 | 2 | 14566 | RRGGRALRVRPETWEEAGEKM |
| | | 1 | | | | PSESFCLAAQARLDSKWLKTDI |
| | | 1 | | | | QLAFTRDGLCGLWNEMVKDG |
| | | 1 | | | | EIVYTGTESTQNGELPPRKDDS VEPSGTKKEDLNDKEKKDEEET |
| | | 1 | | | 1 | PAPIYRAKSILDSWVWGKOPDV |
| | | 1 | | | | NELKECLSVLVKEQQALAVQS |
| | | 1 | | | | ATTTLSALRLKORLVILERYFIA |
| | | 1 | | | | LNRTVFOENVKVKWKSSGISLP |
| | | 1 | | | | PVDKKSSRPAGKGVEGLARVG |
| | | 1 | | | | SRAALSFAFAFLRRAWRSGEDA |
| | | ŀ | | | | DLCSELLQESLDALRAL |
| 6019 | 36387 | В | 6065 | 75 | 581 | |
| 6020 | 36388 | A | 6066 | 517 | 5495 | ESFFTGQNCRNNEKVTFVRIAD |
| | | ŀ | | | | LENHNNDGGFWTVIDGKVYDI |
| | | 1 | | | | KDFQTQSLTENSILAQFAGEDP |
| | | | | | | VVALEAALQFEDTRESMHAFC |
| | | 1 | | | | VGQYLEPDQEGVTIPDLGSLSSP |
| | | | | | | LIDTERNLGLLLGLHASYLAMS |
| 1 | | 1 | | | | TPLSPVEIECAKWLQSSIFSGGL QTSQIHYSYYEEKDEDHCSSPG |
| 1 | | 1 | | | 1 | GTPASKSRLCSHRRALGDHSQA |
| | 1 | 1 | | | | FLQAIADNNIQDHNVKDFLCQI |
| | | 1 | | | | ERYCROCHLTTPIMFPPEHPVEE |
| | | | | | | VGRLLLCCLLKH |
| 6021 | 36389 | Α | 6067 | 1 | 1851 | |
| 6022 | 36390 | Α | 6068 | 53 | 423 | YHLTLLIHGTKVSATRPGHCSP |
| | | 1 | | | 1 | GKLPSWVPISLQCTPSSPECRSV |
| | | 1 | | | | *RQL*HGHMHELLYIITKADSVI |
| | | 1 | | | | TASCLISRSEW\WGDGGTVSLV |
| | | 1 | | | | QRFVDYGSSQCQRPHRTGCASS SAPQRASSVAPG |
| 6023 | 36391 | A | 6069 | 1 | 49 | EWSGTRTWWRPWSCRT*CRT |
| 6024 | 36392 | A | 6070 | 1 | 726 | _ |
| 6025 | 36393 | A_ | 6071 | 368 | 485 | |
| 6026 | 36394 | Α | 6073 | I | 414 | |
| 6027 | 36395 | Α | 6074 | 3 | 535 | RRREFPAKERESASMSSPEE*P/ |
| | | 1 | | | | DMAKGAPPSQPPPNSVPAD/CS |
| 1 | | 1 | | | | RSVRLSSSNFEESLRPTEDDEGQ |
| 1 | 1 | 1 | | 1 | | EGQDSMSRAKANWLRAFNKV |
| | 1 | | | 1 | | RMQLQEARGEGEMSKSLWFKG |
| | 1 | | | 1 | | GPGGGLIIIDSMPDIRKRKPIPLV SDLAMSLVQSRKAAITSALASS |
| | | 1 | | | | TLNNEELKNHVYKKTLQALIYP |
| | | - | | | | ISC |
| 6028 | 36396 | Α | 6075 | I | 222 | |
| 6029 | 36397 | Α | 6076 | 2 | 284 | NGIPDFSNTTLLRGLQMPGARG |
| 1 | | 1 | | | | PCCGSQRHINLLMGTGVFLVK |
| | 1 | 1 | | | 1 | MKA/NEFFFLDSETRLCKIAPEG |
| | 1 | 1 | | | | WREQPQKTSMNTFTLFLRIKFF |
| | | | | | | VSHYGLL |

| SEO ID | ISEO ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|-------------|-----|------------|-------------------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \-possible nucleotide insertion) |
| 6030 | 36398 | A | 6077 | 91 | 749 | |
| 6031 | 36399 | c | 6078 | 1 | 380 | |
| 6032 | 36400 | Ā | 6079 | li - | 877 | MPRPDLAPALLVAVLVLLYLL |
| 0032 | 30400 | ľ | 0077 | , | l"" | VSAAAPAPSSDSTPENVCPVET |
| | 1 | 1 | | | | TINFIWELSSPHNTSAVLLVVF |
| | 1 | | | | | HKGPSPKFEVKLKKNANGLGFS |
| | 1 | ĺ | | | | FVOMEKESCSHLKSDLVRIKRL |
| | | | | | | FPGHPAEENGAIAAGDIILAVN |
| | | l | | | | GSPRKASSSRCRGSWAMOLSV |
| | | 1 | | | | QAGPSFASYYPAAVEVLHLLRG |
| | | 1 | | | | APQEVTLLLCRPPPGALPELEQE |
| | 1 | | | | | WQGQKYKCAWAIVNEAEVEE |
| l | | 1 | | | | VVEVAGTVEFFGDQ\GA*CHHP |
| | | 1 | | | | ACSGKPLGWHGGLSRKCPRLFF |
| | | 1 | | | | RGATRVTGAQGLKEVKQQSFR |
| | | | | | | SNMMWLGLRL |
| 6033 | 3640I | Α | 6080 | 1 | 1683 | |
| 6034 | 36402 | В | 6081 | 66 | 1214 | |
| 6035 | 36403 | Α | 6082 | 1 | 5694 | |
| 6036 | 36404 | Α | 6083 | 3 | 483 | SSLTSSMEDPAAPGTGGPPANG |
| | | 1 | | | | NGN\GGGKGKQAAPKGREAFR |
| | | | | | | SQRRESEGSVDCPTLEFEYGDA |
| | | | | | | DGHAAELSELYSYTENLEFTNN |
| | ŀ | | | | | RRCFEEDFKTQVQGKEWLELE |
| | l | | | | | EDAQKAYIMGLLDRLEVVSRE RRLKAARAVLYLAOGTFGECD |
| | | | ĺ | | | SEVDVLHWSRY |
| 6037 | 36405 | Α | 6084 | 1 | 2646 | SEVDVLHWSKI |
| 6038 | 36406 | A | 6085 | 115 | 1289 | FSPLEPRLCSLGGWGALOAGEP |
| 0020 | 20400 | | 0005 | 1113 | 1207 | COPSRAGCGREGATMGCTLSA |
| | | | | | | EERAALERSKAIEKNLKEDGIS |
| | | | | | | AAKDVKLLLLGAGESGKSTIVK |
| | | | | | | QMKIIH\EDGFSGEDVKQYKPV |
| ł | ŀ | | | | | V\YSNTIOSL\AAIVRAMDTLGIE |
| | | | | | | YGDKERKADAKMVCDVVSRM |
| | | | | | | EDTEPFSAELLSAMMRLWGDS |
| | | | | | | GIQECFNRSREYQLNDSAKYYL |
| | | | | | | DSLDRIGAADYQPTEQDILRTR |
| | | | | | | VKTTGIVETHFTFKNLHFRLFD |
| | | 1 | | | | VGGQRSERKKWIHCFEDVTAII |
| l | | | | 1 | | FCVALSGYDQVLHEDETTNRM |
| 1 | | | | | | HESLMLFDSICNNKFFIDTSIILF |
| l | | 1 | | 1 | 1 | LNKKDLFGEKIKKSPLTICFPEY |
| l | | | | | | TGPNTYEDAAAYIQAQFESKNR |
| l | 1 | 1 | | 1 | | SPNKEIYCHMTCATDTNNIQVV |
| L | | | | | | FDAVTDIIIANNLRGCGLY |
| 6039 | 36407 | A | 6086 | 1 | 1053 | |

| SEQ ID | | Met | SEQ ID NO: | Nucleotide | | Amino acid sequence (X-Unknown, |
|--------|------------|-----|------------|-------------------------------|---------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 6040 | 36408 | Α | 6087 | 2 | 377 | IYDGFDGFAKGQIKEIGWTDVG |
| | | 1 | l | 1 | | GWTGQGGSILGTKRVLPGK/Y |
| | | | | | | MEEIATQMRTHSINALLIIGGFE |
| | | 1 | l | | i | AYLGLLELSVFVTLKLFYQHFM |
| | | l | ŀ | l | | HVLLTLIPNRRVPICPTSPSACC |
| | | | | | | LWSVSHAFRCAYEQN |
| 6041 | 36409 | Α | 6088 | 1 | 591 | |
| 6042 | 36410 | Α | 6089 | I | 2391 | PGRAAPLGLLAMDADDSRAPK |
| | | 1 | | | | GSLRKFLEHLSGAGKAIGVLTS |
| | | | | | | GGDAQGMNAAVRAVVRMGIY |
| | | | | | | VGAKVYFIYEGYQGMVDGGSN |
| | | | | | | IAEADWESVSSILQVGGTIIGSA |
| | | | | | | RCQAFRTREGRLKAACNLLQR |
| | | | | ļ | | GITNLCVIGGDGSLTGANLFRK |
| | | | l | | | EWSGLLEELARNGQIDKEAVQ |
| | | | | | | KYAYLNVVGMVGSIDNDFCGT |
| | | | | | | DMTIGTDSALHRIIEVVDAIMTT |
| | | ŀ | | | | AQSHQRTFVLEVMGRHCGYLA |
| | | ŀ | l | | | LVSALACGADWVFLPESPPEEG |
| | | i i | | | | WEEQMCVKLSENRARKKRLNI |
| | | | | | | IVAEGAIDTQNKPITSEKIKELV |
| | | | | | | VTQLGYDTRVTILGHVQRGGTF |
| | | ŀ | ŀ | | | SAFDRILASRMGVEAVIALLEA |
| i | | | l | l | | TPDTPACVVSLNGNHAVRLPL |
| | | ŀ | | | | MECVQMTQDVQKAMDERRFQ |
| | | 1 | | | | DAVRLRGRSFAGNLNTYKRLAI |
| l | | ŀ | |] | | KLPDDQIPKTNCNVAVINVGAP |
| | | 1 | | | | AAGMNAAVRSAVRVGIADGH |
| | | 1 | | | | RMLAIYDGFDGFAKGQIKEIGW |
| | | i i | | | | TDVGGWTGQGGSILGTKRVLP |
| | | l | | | | GKYLEEIATQMRTHSI\NALLIIG |
| | | l | l | | | GF\EAYLGLLELSAAREKHEEFO |
| 1 | 1 | ŀ | | | | VPMVMVPATVSNNVPGSDFSIG |
| | | 1 | | 1 | | ADTALNTITDTCDRIKQSASGT |
| 1 | | 1 | l | l | | KRRVFIIETMGGYCGYLANMG |
| | | 1 | | l | 1 | GLAAGADAAYIFEEPFDIRDLQ |
| 1 | | | l | l | 1 | SNVEHLTEKMKTTIORGLVLRN |
| | | | l | l | | ESCSENYTTDFIYOLYSEEGKG |
| | | | | 1 | | VFDCRKNVLGHMQQGGAPSPF |
| 6043 | 36411 | A | 6090 | l | 459 | |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|---------|------------|--|------------|-------------------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *-Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 6044 | 36412 | Α | 6091 | 1930 | 5781 | RAKSPANIIMTGSNSHITILTLN |
| | | | | | | VNGLNSPIKRHRLASWIKSQDP |
| | | | | | | SVCCIQETHLMCRDTHRLKIKG |
| | | 1 | | | | WRKIYQANGKQKKAGVAILVS |
| | Į. | | | | | DKTDFKPTKIKRDKEGHYMMV |
| | | | | | | KGSIQQEELTILNMYAPNTGAP |
| | l . | | | | İ | RFIKQVLSDLQRDLDSHTLIMG |
| | | | | | | DFNTPLSTLDRSTRQKVNKDTQ |
| | 1 | | | | | ELNSALHQADLIDIYRTLHPKST |
| l | | | | | | EYTFFSAPHHSYSKIDHILGSEA |
| | | | | | 1 | LLSKCKRTEIITNYLSDHSAIKL |
| | | | | | | ELRIKNLTQSR |
| 6045 | 36413 | Α | 6092 | 1 | 3654 | |
| 6046 | 36414 | A | 6093 | 1 | 5127 | |
| 6047 | 36415 | Α | 6094 | T | 3663 | |
| 6048 | 36416 | Α | 6095 | 1 | 3210 | MVKGSIQQEELTILNIYAPNTG |
| 1 | | | | | | ALRFIKQVLRDLQRDLDSHTIIM |
| | | | | | | GDFHTPLSTLDRSTRQKVNKDI |
| | | | | | | QELNSALHQEDLIDIYRTLHPKS |
| | | | | | | TEYTFFSAPHHTYSKIDHIVGSK |
| | | | | | | ALLSKCKRTEIITNCLSDHSAIK |
| | | | | | | LELRIKNLTQNRSTTWKLNNLL |
| | 1 | l | | į | | LNDYWVHNEMKAEIKMFFETN |
| | | | | | | ENKDTTYQNLWDTFKAVCRGK |
| | 1 | | | 1 | | FIALNAHKRKQERSKIDTLTSQL |
| | | | | | | KELEKQEQTHSKASRRQEITKIR |
| - CO 40 | 0 | <u>. </u> | 1001 | | 5000 | AELKEIETQ |
| 6049 | 36417 | A | 6096 | 1 | 5073 3489 | MGDFNTPLSTLDRSTROKVNK |
| 6050 | 36418 | Α | 6097 | l' . | 3489 | DTQELNSALHQADLTDIYRTLH |
| | 1 | | | | | PKSTEYTFFSAPHHTYSKIDHIV |
| | | 1 | | | | GSKALLSKWKRTEIITNYLSDH |
| | | 1 | | | | SAIKLELRIKNPTOSRSTTWKLN |
| ĺ | | | | | i | NLLLNDYWVHNKMKAEIKMFF |
| 1 | | | | | | ETNENKDTTYQNLWDAFKAVC |
| | | 1 | | ŀ | | RGKFIPLNAHKRKOERSKIDTL |
| | | 1 | | | 1 | TSQLKELEKQEQTHSKASRRQE |
| | | 1 | | | 1 | ITKIRAELKEIETOKTLOKINESR |
| | | | | | | SWFFERINKTDRPLARLIKKKR |
| l | | 1 | | | | EKNOIDTIKNDK |
| 6051 | 36419 | A | 6098 | 1 | 3235 | EKINGIDTIKNDK |
| 0031 | 30419 | Α_ | 0090 | 1 | 3233 | |

| SEO ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X-Unknown. |
|--------|------------|-----------|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | | *=Stop codon, /=possible nucleotide |
| | sequence | ı | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 6052 | 36420 | A | 6099 | | 3070 | MATLIPLLFHKHPHLTORYOFN |
| 0052 | 30.20 | l'` | 0033 | ľ | 50.0 | VRGGCPTSTSAIATLDPRTAVER |
| | | | | | | LMSVFQTSAPWPFWGFTHQTP |
| | | | | 1 | | VPOPLKVKIHSSADTAADIOAN |
| | | | | | | RVWSGPPANSKRPAAEEGKLT |
| | | | | | | NRKDIHTKNPSVRHHHQRPKV |
| 1 | ļ. | | | | | DKTTKTGKKORRKTGNSKKOS |
| | | | | } | 1 | ACPPPKERSSSTATEQSWTEND |
| | | ı | | | | FDKLREGFRRSNYSKLQDEIQT |
| | | l | | | | KGKEVENLEKSLDECITRITNTE |
| | | 1 | | | | KGLKKLENYVKNEETSGANAI |
| | | l | | 1 | | NWKKGINKIDRPLARL |
| 6053 | 36421 | A | 6100 | 1 | 3297 | NWKROINKIDRFEARE |
| 6054 | 36422 | A | 6101 | 1 | 2563 | MKAEIKMFFETNENKDTTNON |
| 1005. | 50122 | ľ. | | ľ | | LWDAFKAEEVESLNRPITGAEI |
| | | İ | | | | GAIINSLPTKKSPGPDGFTAEFY |
| | | l | | | | ORYKEELVPFLLKLFOSIEKEEI |
| 1 | | ı | | | | LPNSFYEASIILIPKPGRDTTKKE |
| | | | | | | NFRPISLMNIDAKILNKILANRI |
| | | | | | | QQHIKKLIHHDQVGFFPGMQG |
| | | 1 | | 1 | | WFNIRKSINVIQHINRAKDKNH |
| | | | | Ì | | MIISIDAEKAFDKIOOPFMLKTL |
| | | | | | | NKLGIDGTYFKIIRAIYDKPTAN |
| | | 1 | | | | IILNGOKLEAFPLKTGTROGCPL |
| | | 1 | | 1 | | SPLLFNILLEVLARAIRQEKEIK |
| | | 1 | | | - | GIQLGKEEVKLSLFADDMIVYL |
| | | | | | | ENPIVSAONLLKLISNFSKVSGY |
| l | | | | | | KINVQKSQAFLYTSNRQTESQI |
| | | | | 1 | | MSELPFTIASKRIKYLGIOLTRD |
| | | | | | | VKDLFKENYKPLLKEIKEDTNK |
| | | 1 | | | | WKNIPCSWVGRINIVKMAILPK |
| l | 1 | | | | - | VIYRFNAIPIKLPMTFFTELEKTI |
| | | | | | | LKFIWNQKRAHITKSILSQKNK |
| 1 | | 1 | | | | AGGITLPDFKLYYKATVTKTA |
| 1 | | | | | | WYCYQNRDIDQWNRTEPSEITP |
| | | 1 | | | | HTYNYLIFDKPEKNKOWGKDS |
| 1 | l | | | l | | LFNKWCWENWLAIWRKLKLD |
| 1 | | 1 | | | | PFLTPYTKINSRWIKDLNVRPKT |
| 1 | | 1 | | 1 | | IKTLEENLGITIQDIGMGKDFMS |
| 1 | 1 | 1 | | 1 | | RTPKAMATKAKIDKWDLIKLK |
| 1 | 1 | 1 | 1 | 1 | | SFCTAKETTIRVNRQPTTWEKIF |
| | | 1 | 1 | 1 | | ATYSSDKGLISRIYNELKQIYKK |
| 1 | 1 | 1 | 1 | Ì | | KTNNPIKKWEKDMNRHFSKED |
| 1 | 1 | 1 | 1 | | | IYAAKKHMKKCSSSLAIREMQI |
| | | | | | | KTTMRYHLTPVRMAIIKKSGNN |
| 6055 | 36423 | Α- | 6102 | 1 | 3417 | |
| 3000 | 155725 | <u>'`</u> | 10.02 | · | | <u> </u> |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------------------|---------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 6056 | 36424 | Α | 6103 | i i | 3579 | MPGHNLKWKLNRGTVLIETGI |
| | | l | | | | QLSTSTILGSASEPPSAPIPKAQV |
| | | | | | | SSTEKLRNCIDDLKPFPALASEL |
| | | l | i | | | SRRAKALQIAGFPPMKVPRDTI |
| | | | | | | SKVCLDKTVGKLCHSGEESRK |
| | | 1 | | | | CTLICNNKHYPIQDNLQGYKTQ |
| l | | | | | | NKFLNKEILELSALRRNAERRE |
| | ľ | | | | | RDLMAKYSSLEAKLCQIESKYL |
| | | | | | | ILLQEMKTPVCSEDQGPTREVI |
| 1 | 1 | | | | | AQLLEDALQVESQEQPEQAFV |
| | | ı | | | | KPHLVSEYDIYGFRTVPEDDEE |
| | | | | 1 | | EKLVAKVRALDLK |
| 6057 | 36425 | A | 6104 | 1 | 4371 | |
| 6058 | 36426 | Α | 6105 | Ī | 1825 | MVKGSIQQEELTILNTYAAHTG |
| | | 1 | | | | APRLIKQVLSDLQRDLDSHTIIM |
| İ | | | | | | GDFNTPLSTLDRSTRQKVNKDT |
| | | 1 | | | | QELKSALHQADLTDIYRTLHHK |
| | | | | | | STEYTFFSAPHHIYSKIDHILGSK |
| | | | | | | ALLSKCKRTEHTNYLSDHSAIK |
| i | | | | l | | LELWIKNLTQNHSTTWELNNLL |
| | | İ | | | | LNDYWVHNEMKAEIKMFFETN |
| | | | | ŀ | | ENKDTTYHNLWDTFKAVCRGK |
| | | | | l | | FIPLNAHKRKQERSKIDTLTSQL |
| | | | | | | KELEKQEQTHSKASRRQEITKIR |
| | | l | | | | AELKEIETQKTLQKINESRSWFF |
| | | | | l | | ERINKIDRLLARLIKKKREKNQI |
| | | | | | | DAIKNDKGDITTDPTEIQTTIRE |
| | | | | | | YCKHLYANKLENLEEMDKFLD |
| | i | | | | | TYTLPRLNQEEVESLNRPITGAE |
| | | 1 | | | | IVAIINSLPTKKSPGPDGFTAKF |
| | | 1 | | | | YQRYKEELVPFLLKLFQSIEKE |
| | i | 1 | | | | GILPNSFYEASIILIPKPGRDTTK |
| | i | 1 | | | | KENFRPISLMNIDAKILNKKLA |
| | | 1 | | ĺ | | KRIQQHIKKLIHHDQVGFIPGM |
| | | | | | | QGWFNIRKSINVIQHINRAKDK |
| | | | | l | | NHMIISIDAEKAFDKIQQPFMLK |
| 1 | 1 | | | | | TLNKL\GIKYLGIHLTRDVKDLF |
| l | | | | | | KENYKPLLKEIKEDRNKWKNIP |
| | | | | | | CSWVGRINIVKMAILPKNILITL |
| | | _ | | | | QLLLVLPELSTLIPLWLPALAGQ |
| 6059 | 36427 | Α_ | 6106 | 1 | 4449 | |

| SEO ID | ISEO ID NO: | Tales | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------------|----------------|------------|------------|-------------------------------|-----------------------------|---|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 6060 | 36428 | IA. | 6107 | 824 | 3693 | AWKGTTDRSTRQKVNKDTQEL |
| 0000 | 30420 | l^ | 0107 | 024 | 50,55 | NSALHOADLIDIYRTLHPKSTE |
| | | | | | | YT/FFSAPHHTYSKIDHIVGSKA |
| | | | | | | LLSKCKRTEITNYLSDHSAIKL |
| | 1 | | | ı | | ELRIKNFTQSRSTTWKLNNLLL |
| | | | | | | NDYWVHNEMNAEIKMFFETNE |
| | | | | 1 | | NKDTTYONLWDAFKAVCRGK |
| | | | | | | FIALNAHKRKOERSKIDTLTSOL |
| | 1 | 1 | | | | KELEKOEOTHSKASRROEITKIR |
| | | 1 | | | | AELKEIETOKTLOKINESRSWFF |
| | | | | | | ERITKSDRPLARLIKKKREKNOI |
| | | | | | | DTIKNDKGDIT |
| 6061 | 36429 | A | 6108 | 1 | 3297 | |
| 6062 | 36430 | В | 6109 | 112 | 3300 | |
| 6063 | 36431 | A | 6110 | 3 | 3316 | |
| 6064 | 36432 | Α | 6111 | I | 3457 | |
| 6065 | 36433 | Λ | 6112 | I | 3170 | MVKGSIQQEELTILNIYAPNTG |
| | | | | | | APRFIKQVLSDLQRDLDSHTLI |
| ļ. | | l | | | | MGDFNTPLSTLDRSTRQKVNK |
| | | | | | i e | DTQELNSALHQADLIDIYRTLH |
| | | | | | | PKSTEYTFFSAPHHTYSKIDHIL |
| | | 1 | | | | GSKALLSKCKRIEIITNYLSDHS |
| | | | | | | AIKLELRIKNLTQSRSTTWKLN NLLLNDYWVHNEMKTEIKMFF |
| | | | | | | |
| | | | | | | ETNENKDTTYQNLWDAFKAVC RGKFIALNAYKRKEERSKIDTL |
| | | | | 1 | | TSOLKELEKOEORHSKPSRROE |
| | | 1 | | | | ITKMRAELKEIETQ |
| 6066 | 36434 | В | 6113 | 1 | 4753 | TRANSCEREIQ |
| 6067 | 36435 | В | 6114 | 1 | 3384 | |
| 6068 | 36436 | Α | 6115 | 1 | 3345 | |
| 6069 | 36437 | Α | 6116 | I | 3780 | |
| 6070 | 36438 | A | 6117 | 1 | 3720 | |
| 6071 | 36439 | Α | 6118 | 1 | 3894 | |
| 6072 | 36440 | Α | 6119 | 1 | 3335 | MVKGSIQQEELTILNIYAPNTG |
| | | 1 | | | | APRFIKQVLSDLQRDLDSHTLI |
| l | | 1 | | | | MGDFNTPLSTLDRSTRQKVNK |
| l | | | | | | DTQELNSALHQADLIDIYRTLH |
| | | 1 | | | | PKSTEYTFFSAPHHTYSKIDHIV |
| l | | 1 | | | | GSKALLSKCKRTEIITNYLSDHS |
| | | | | | | AIKLELRIKNLTQSRSTTWKLN |
| | | | | | | NLLLNDYWVHNEMKAEIKMFF |
| | | | | | | ETNENKDTTYQNLWDAFKAVC |
| | | | | | | RGKFIALNVYKRKQERSKIDTL |
| | | | | | | TSQLKELEKQEQTHSKASRRQE |
| (0.00 | 26111 | ١ | (120 | ļ | 2000 | ITKIRAELKEIETQ |
| 6073 6074 | 3644I 36442 | A | 6120 | I | 3780 3852 | |
| 6074 | 36442 | A | 6121 | I | 3345 | |
| 6076 | 36444 | B | 6123 | 1 | 6136 | |
| 6077 | 36444 | В | 6124 | 1 | 3924 | |
| 0077 | 20442 | Γ_D | 0124 | 1. | J/67 | |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 6078 | 36446 | В | 6125 | 295 | 4185 | |
| 6079 | 36447 | Α | 6126 | 1 | 405 | |
| 6080 | 36448 | Α | 6127 | 1 | 1059 | |
| 6081 | 36449 | Α | 6128 | 2 | 518 | EKATCDENDSVSNIATEIKEGQ |
| | 1 | l | | | | QSV\HVSPQKQSAWKVIFKKKV |
| | | | | 1 | | SLLNIATRITGGGKSGTVSSQKQ |
| | | | ĺ | 1 | | PPSKATSDKTDSALNIATEIKDG |
| | 1 | 1 | | | | LQCGTVSSQKQPALKATTDEED |
| | 4 | | | | | SVSNIATEIKDGEKSGTVSSQKQ |
| | | 1 | | | | PALKATTDEKDSVSNIATEIKD |
| | | 1 | | | | GEKSVTVSSQKQPASK |
| 6082 | 36450 | A | 6129 | I | 843 | |
| 6083 | 36451 | Α | 6130 | 1 | 432 | |
| 6084 | 36452 | A | 6131 | 2 | 835 | CGSAQAAAAAAEEATEKIPAL |
| | | | | | | RP/ASAVGAAGALAVLRDPRA |
| 1 | 1 | | | | | WREAGSKS/PETPFS*CQGA/HG |
| | | 1 | | | | GGQFCPSGTAFPGKMKVMMR |
| | 1 | l | | | | KRKKKGQCLPGICRSLKRRKSP |
| | | l | | | | RSPGM/IGYSTLSIPPEMLASYQ |
| | | | | | | SYSSTFHSLEEQQVCMA/G*HR |
| | | 1 | | | | QMPGADKPVRACQRVLAGVW |
| | | | | | | AGFTMRHQSRLY*ECSICGVIFR |
| | | | | | | HRCVAHLLGRAIGAGLFVITPA |
| | | ı | | | | GERGMCCKAIKLGNARVFPVT |
| | | 1 | | | | TL*NDGQCQACMHAG/TTLEDP |
| | 1 | | | | | GKNYISSSPSSSSSSSSPSSPRVPS |
| 6085 | 36453 | С | 6133 | 278 | 446 | |
| 6086 | 36454 | Α | 6134 | 1 | 1152 | |
| 6087 | 36455 | Α | 6135 | 1 | 639 | |
| 6088 | 36456 | Α | 6136 | 12 | 1436 | |
| 6089 | 36457 | Α | 6137 | 367 | 1056 | |
| 6090 | 36458 | A | 6139 | I | 4263 | |
| 6091 | 36459 | Α | 6140 | 1 | 1311 | |
| 6092 | 36460 | Α | 6141 | 1093 | 1358 | MQKKPLTKFNNPSC*KLSIN*V |
| | | l | | | | LMGRISK*VTTTATTTTTTTT |
| | | | 1 | | | TITTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT |
| | | 1 | | | | TTTTTTMGPTLPLIPIGLGS |
| 6093 | 36461 | Α | 6142 | 1 | 699 | |
| 6094 | 36462 | Α | 6143 | 1 | 489 | |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X-Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | ļ. | | sequence | | |
| 6095 | 36463 | Ā | 6144 | 5 | 916 | ALGGTPMLGKLAMLLWVOOA |
| 0093 | 30403 | l^ | 0144 | ľ | 710 | LLALLLPTLLAOGEARRSRNTT |
| | | | İ | | | RPALLRLSDYLLTNYRKGVRPV |
| | | 1 | | 1 | | RDWRKPTTVSIDVIVYAILNVD |
| | | l | | | | EKNOVLTTYIWYRQYWTDEFL |
| 1 | | 1 | | | | OWNPEDFDNITKLSIPTDSIWVP |
| ľ | | 1 | | 1 | | DILINEFVDVGKSPNIPYVYIRH |
| ļ | | 1 | | 1 | | OGEVONYKPLQVVTACSLDIY |
| l | | 1 | | | | NFPFDVONCSLTFTSWLHT/SPG |
| | | 1 | | | , | HOHLFVALARKGEIRQECLHEP |
| | 1 | 1 | | l | | GRVGVAGGAALLSGVOHGKO* |
| | | 1 | | | | LLCRNEVLCGHPPAAPLLCGOP |
| | | | | | | ATAOHLPHGHGHRGLLPAPOO |
| | | | | | | WREGLFONYTPPGLLGLPDHRF |
| 6096 | 36464 | A | 6145 | 5 | 756 | WIGGEL GITTITI GEEGEL BING |
| 6097 | 36465 | A | 6146 | 1 | 471 | |
| 6098 | 36466 | A | 6147 | 184 | 1097 | ALGGTPMLGKLAMLLWVQQA |
| 00,0 | 100,00 | ľ | | | | LLALLLPTLLAQGEARRSRNTT |
| | | l | 1 | | | RPALLRLSDYLLTNYRKGVRPV |
| | | l | 1 | | | RDWRKPTTVSIDVIVYAILNVD |
| | | 1 | | | | EKNOVLTTYIWYRQYWTDEFL |
| | | İ | | | | OWNPEDFDNITKLSIPTDSIWVP |
| | | l | | | | DILINEFVDVGKSPNIPYVYIRH |
| | | | | | | QGEVQNYKPLQVVTACSLDIY |
| ĺ | | 1 | | | 1 | NFPFDVQNCSLTFTSWLHT/SPG |
| | 1 | | | | | HQHLFVALARKGEIRQECLHEP |
| | | 1 | | | | GRVGVAGGAALLSGVQHGKQ* |
| | | l | | | | LLCRNEVLCGHPPAAPLLCGQP |
| | | l | | | | ATAQHLPHGHGHRGLLPAPQQ |
| | | 1 | | | | WREGLFQDYTPPGLLGLPDHRF |
| 6099 | 36467 | Α | 6148 | 3 | 672 | |
| 6100 | 36468 | Α | 6149 | 3 | 398 | LRKIKIDLGKFSDNPDGYIDVLQ |
| | | l | | | | GLRQSFDLTWRDIMLLLDQSLT |
| | 1 | 1 | | l | I | PNEKSAAKTAAREFGDLWFV/S |
| | | | 1 | 1 | | FQN*SCKTTNRSSNGAPDAVHD |
| | | | | | 1 | *D/PTADPWTGPLAHALMLMTL |
| | 1 | 1 | 1 | | I | KAPLTRKSQLHDPYYAPIQQEA |
| | | _ | | | | v |
| 6101 | 36469 | Α | 6150 | 1 | 420 | |

| NO: | SEQ ID | SEO ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X-Unknown, |
|--|--------|------------|------|------------|-------------------|-----------------------------|--|
| | | of peptide | | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | | sequence | | 09/540,217 | | of peptide sequence | delction, \=possible nucleotide insertion) |
| GNKDPGGTLERGKVEDASC TSRTLKETSGKAEHRKKQDG CSPQGKNALKMYSGEFDPYS CVPFSLSDLKQLKIDLGRFSD DGYIDVLQGLGGSPGLTWRE MILLLDGTLTPNERNATITAAI FGDLWCLSQVDRMTTEERI FPTGQQAVPSADPH*DTESEI DWCCRHLLTCVLEGLRKTRK AVNFSVMSTVTQGKEENPTA ERLREALRKHTSLSPDSIEQO LKIKFITRSAADIRKQTSKVHI PGAKLKTPY FGRALKKTPSLSPDSIEQO LKIKFITRSAADIRKQTSKVHI PGAKLKTPY FGRALKTPY | | | | | sequence | | |
| GNKDPGGTLERGKVEDASC TSRTLKETSGKAEHRKKQDG CSPQGKNALKMYSGEFDPYS CVPFSLSDLKQLKIDLGRFSD DGYIDVLQGLGGSPGLTWRE MILLLDGTLTPNERNATITAAI FGDLWCLSQVDRMTTEERI FPTGQQAVPSADPH*DTESEI DWCCRHLLTCVLEGLRKTRK AVNFSVMSTVTQGKEENPTA ERLREALRKHTSLSPDSIEQO LKIKFITRSAADIRKQTSKVHI PGAKLKTPY FGRALKKTPSLSPDSIEQO LKIKFITRSAADIRKQTSKVHI PGAKLKTPY FGRALKTPY | 6102 | 36470 | A | 6151 | ti - | 878 | TLLPPRPGVGSDYPNIPGCPMW |
| CSPQGKNALKMYSGEFDPVR | | | | | | | GNKDPGEGTLERGKVEDASOR |
| CVPFSLSDLKQLKIDLGRFSD DGYIDVLQGLGQSFDLTWRE MILLDQTLTPNERNATITRAI FGDL WCLSQVNDRMTTEERI FPTGQAQVPSADPH*DTESSE DWCCRHLLTCVLEGLRKTRK AVNFSVMSTVTQGKEENPTA ERLREALRKHTSLSPDSIEGO LKIKFITRSADDIRKQTSKVHI PGAKLKTPY | | | l | | | | TSRTLKETSGKAEHRKKODGK |
| CVPFSLSDLKQLKIDLGRFSD DGYIDVLQGLGQSFDLTWRE MILLDQTLTPNERNATITRAI FGDL WCLSQVNDRMTTEERI FPTGQAQVPSADPH*DTESSE DWCCRHLLTCVLEGLRKTRK AVNFSVMSTVTQGKEENPTA ERLREALRKHTSLSPDSIEGO LKIKFITRSADDIRKQTSKVHI PGAKLKTPY | | | | | | | CSPQGKNALKMYSGEFDPVRV |
| MILLDOPTLTPNERNATTIAAI FGDLWCLSQVNDRMTTERRI FPTGQQAVPSADPH*DTESSE DWCCRHLITCVLEGLRKTRR AVNFSWMSTVTQGKEENPTA ERLREALRKHTSLSPDSIEGQ LKIKFITRSAADIRKQTSKVHI PGAKLKTPY | ŀ | | 1 | | | | CVPFSLSDLKQLKIDLGRFSDNP |
| FGDL.WCLSQVNDRMTTERRI | ŀ | | | | | | DGYIDVLQGLGQSFDLTWRDI |
| PFTGQQAVPSADPH*DTESSED DWCCRHLLTCVLEGLRKTRK AVNPSWMSTVTQGKEENPTA ERLREALRKHTSLSPDSIEQO LKIKFITRSAADIRKQTSKVHI FGAKLKTPY | | | 1 | | | | MLLLDQTLTPNERNATITAARE |
| PFTGQQAVPSADPH*DTESSED DWCCRHLLTCVLEGLRKTRK AVNPSWMSTVTQGKEENPTA ERLREALRKHTSLSPDSIEQO LKIKFITRSAADIRKQTSKVHI FGAKLKTPY | l | | | | | | FGDLWCLSQVNDRMTTEERER |
| AVNFSWASTVTOGKEEMPTA ERLREALRKHTSLSPDSIEGQ LKIKFITRSAADIKKQTSKVHI PGAKLKTPY | i | | ĺ | | | | FPTGQQAVPSADPH*DTESEHG |
| BERLEALRKHTSLSPDSIEGO | | | | | | | DWCCRHLLTCVLEGLRKTRKK |
| LKIKFITRSAADIRKQTSKVH PGAKLKTPY | | | | | | | AVNFSVMSTVTQGKEENPTAFL |
| PGAKLKTPY | | | | | | | ERLREALRKHTSLSPDSIEGQLI |
| Section Sect | | | | | | | LKIKFITRSAADIRKQTSKVHLR |
| Section | | | | | | | PGAKLKTPY |
| Section Sect | | | | | | | |
| STOPPING | | | | | - | | |
| SIV*GKDTPLNAIVIHEVYEE AAVDGRLWAGDQILEVNGV RNSSHEEAITALMQTPQKVRI VYRDEAHYRDEENLEIFPVDI 6107 36475 | | | | | | | |
| AAVGGR.WAGDQILEVNOV. RNSSHEAITALMQTPQKVRI | 6106 | 36474 | A | 6155 |]1 | 335 | |
| RNSSHEEAITALMQTPQKVRI VYRDEAHYRDEENLEIFPVDI 6108 36476 A 6157 109 4991 6108 36476 A 6157 109 4991 6108 36476 A 6158 3 862 6110 36478 A 6159 1 1857 6111 36479 A 6160 3 100 6112 36480 A 6161 1 537 6113 36481 A 6162 125 1184 6114 36482 A 6163 875 1506 LSIYLVTQKAA/SSEWGPEQE ALQEVQAAVQAALILEPYDP GPVVLEVSLADRDAWSLW-WARAGLEPYDP GPVVLEVSLADRDAWSLW-WARAGLEPYDP GPVVLEVSLADRDAWSLW-WARAGLEPYDP GPVVLEVSLADRDAWSLW-WARAGLEPYDP GPVVLEVSLADRDAWSLW-WARAGLEPYDP GPVVLEVSLADRDAWSLW-WARAGLEPYDP GPVVLEVSLADRDAWSLW-WARAGLEPYDP GPVVLEVSLADRDAWSLW-WARAGLEPYDP GPVVLEVSLADRDAWSLW-WARAGLEPYDP GPVVLEVSLADRDAWSLW-WARAGLEPYDP GPVVLEVSLADRDAWSLW-WARAGLEPYDP GPVVLEVSLADRDAWSLW-WARAGLEPYDP GPVVLEVSLADRDAWSLW-WARAGLEPYDP GPVVLEVSLADRDAWSLW-WARAGLEPYDP GPVVLEVSLADRDAWSLW-WARAGLEPYDP GPVVLEVSLADRDAWSLW-WYTAGALOPISRKSLKDSEG SSGWAELRAVHLAWW-WK KWPDVRLDTDSWAV/ANGLEPYDP GPVVLEVSLADRDAWSLW-WYTAGALOPISRKSLKDSEG SSGWAELRAVHLAWW-WK KWPDVRLDTDSWAV/ANGLEPYDP GTRI GTRI GTRI GTRI GTRI GTRI GTRI GTRI | | | 1 | | | | |
| VYRDEAHYRDEENLEIFPVDI | | | | | | | |
| \$\frac{6107}{6108} | | l | | | | | |
| 6108 36476 | (100 | 06106 | ١. | (156 | 100 | 4407 | VYRDEAHYRDEENLEIFPVDLQ |
| 6109 36477 A 6158 3 862 | | | | | | | |
| Set | | | | | | | |
| | | | - | | | | |
| | | | | | | | |
| | | | _ | | | | |
| | | | | | | | |
| ALQEVQAAVQAALILEPYDP. GPVVLEVSLADRDAVWSLW APIGESQQRPLGFWSKALPSS DHKACHAQQHSIIKWKWYIH RARAGPEGTNSSARYAATM* WYTASALQPLSRKSLKOSSG SSQWAELRAVHLAVHVAWK KWPDVRLDTDSWAV/ANGL/ WSGTWKEHDRKIGDKEVWG GTRI 6115 36483 A 6164 I 1566 6116 36484 A 6165 I 1098 6117 36485 A 6166 I 538 6118 36486 A 6167 410 625 LTLVPFSFSVVLTPLPKGNTIR *TGIL*GWNLSWKGTLGFSVT | | | | | | | LSIYLVTOKAA/SSEWGPFOEK |
| GPVVLEVSLADRDAVWSLW APIGESQQRPLGFWSKALPSS DHKACHAQQHSIIKWKWYIII RARAGPEGTNSSARYAATM WITASALQPLSRKSLKDSSEG SSQWAELRAVHLAVHVAWK KWPDVRLDTDSWAV/ANGL/ WSGTWKEHDRKIGDKEVWG GTRI 6115 36483 A 6164 I 1566 6116 36484 A 6165 I 1098 6117 36485 A 6166 I 538 6118 36486 A 6167 410 625 LTLVPFSFVVLTPLPKGNTIR *TGIL*GWNLSWKGTLGFSV | | 30.02 | l' . | 0.05 | 10.5 | 1.2.0 | |
| APIGESQQRPLGF WSKALPSS DHKACHAQQHSIIK WKWYIH RARAGPEGTNSSARY AATM* WTTASALQPLSRKSLKDSSEG SSQWAELRAVHLAVHVAWK KWPDVRLDTDSWAVIANGL/ WSGTWKEHDRKIGDKEVWG GTRI 1566 | | | | | | | |
| DHKACIAQORSIIKWKWYIH RARAGPEGTNSSARYAATM* | | | | | | | |
| RARAGPEGTNSSARYAATM WITASALQPLSRKSLKDSSEG SSQWAELRAVHLAVHVAWK KWPDVRLDTDSWAV/ANGL/ WSGTWKEHDRKIGDKEVWG GTRI G115 36483 A 6164 1 1566 G116 36484 A 6165 1 1098 G117 36485 A 6166 1 538 G118 36486 A 6167 410 625 LTLVPFSFSVVLTPLPKGNTIR *TGIL*GWNLSWKGTLGFSVVL *TG | | | l | | | | |
| WITASALQPLSRKSLKDSSEG SSQWAELRAVHLAVHVAWK KWPDVRLDTDSWAVANGLA WSGTWKEHDRKIGDKEVWG GTRI GTRI 36483 A 6164 I 1566 6116 36484 A 6165 I 1098 6117 36485 A 6166 I 538 6118 36486 A 6167 410 625 LTLVPFSFSVVLTPLPKGNTIR *TGIL*GWNLSWKGTLGFSVT | | 1 | | | | | |
| SSQWAELRAVHLAYHVAWK KWPDVRLDTDSWAV/ANGL/ WSGTWKEHDRKIGDKEVWG GTRI | | i | l | | | | |
| KWPDVRLDTDSWAV/ANGL/ WSGTWKEHDRKIGDKEVWG GTRI 1 | 1 | | | | | 0 | |
| WSGTWKEHDRKIGDKEVWG GTRI | | | | | | | |
| GTRI 6115 36483 A 6164 I 1566 6116 36484 A 6165 I 1098 6117 36485 A 6166 I 538 6118 36486 A 6167 410 625 LTLVPFSFSVVLTPLPKGNTIR *TGIL*GWNLSWKGTLGFSVT | | | | | | | WSGTWKEHDRKIGDKEVWGR |
| 6116 36484 A 6165 I 1098 6117 36485 A 6166 I 538 6118 36486 A 6167 410 625 LTLVPFSFSVVLTPLPKGNTIR *TGIL*GWNLSWKGTLGFSVT | | | | | | | |
| 6117 36485 A 6166 I 538 6118 36486 A 6167 410 625 LTLVPFSFSVVLTPLPKGNTIR *TGIL*GWNLSWKGTLGFSVT | | | Α | | 1 | | |
| 6118 36486 A 6167 410 625 LTLVPFSFSVVLTPLPKGNTIR *TGIL*GWNLSWKGTLGFSV1 | | | | | | | |
| *TGIL*GWNLSWKGTLGFSVT | _ | | _ | | | | |
| | 6118 | 36486 | Α | 6167 | 410 | 625 | |
| | 1 | | 1 | | | | *TGIL*GWNLSWKGTLGFSVTA |
| | 1 | | 1 | | | | QPSSGTPRTALGSRTTKPLLVSL |
| LQV | | | | | | | LQV |

| SEO ID | ISEO ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|-------------|----------|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop endon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| | | <u> </u> | | | | |
| 6119 | 36487 | Α | 6168 | 821 | 1428 | QVTDVQDFPLKCKIQWRRTVR |
| | | | | | | GDLQ/PFTRVTVHWGKGNDQT |
| | | l | | | | FQGLLDTGSELTLIPGDPKRHC |
| | | | | | | GPPVKIGAYGGQIINGVLAQVQ |
| | ļ | l | | | | LTVDAVGPWTHPVV/I/SPVPECI |
| | | | | | | IGIDILSSWQ/NSHIGSLTGRVRA |
| | ł | | | | | TMVGKAKWKPLELPLPRKIVN |
| l | l | | | | İ | QKQYHIPGGIAEIGATIKDLKDT |
| l | | i | | | | G\VIPTSPFNSPI*PMQKTDGSW |
| | | | | | | RMTVDYL |
| 6120 | 36488 | Α | 6169 | 203 | 850 | DVEHVGKMRRRWRRRVVVAD |
| | | | | | | GNVVKPMSCAGDLQ/PFTRVTV |
| 1 | | 1 | | | | HWGKGNDQTFQDLLDTGSELT |
| 1 | | l | | ł | | LIPGDPKRHCGPPVKIGAYGGQI |
| | 1 | 1 | 1 | | | INGVLAQVQLTVDAVGPWTHP |
| 1 | l | ŀ | | | | VV/I/SPVPECIIGIDILSSWQ/NSH |
| | 1 | | | | | IGSLTVHLSSDPKGCHSEWGPE |
| ŀ | | | | | | QEKALQEVQAAVQAALILEPY |
| | | | | 1 | | DPAGPVVLEVSLADRDAVWSL |
| | 1 | | | | | WQAPIGESQORPLGFWSKALPS |
| 6121 | 36489 | A | 6170 | 1 | 864 | |
| 6122 | 36490 | A | 6171 | 1 | 205 | VPDFPAKPIOGPHFNSRYL/REA |
| | | | | | | VHGEAVHAPFIAGQPLT**ELM |
| i | 1 | | | | | SIFPOFOFFLYRRLDSHSGOSWQ |
| | | 1 | | | | 1 |
| 6123 | 36491 | Α | 6172 | 1 | 3039 | |
| 6124 | 36492 | Α | 6173 | 1 | 1364 | MIISIDAEKAFDKIQQPFMLKTL |
| i | | | | | 1 | SKLEETASPSPVVATYTPQPML |
| | | l | | | 1 | PSAFPPLSEEINPVLPETTVMAS |
| 1 | | 1 | | | | PEAVTRODNVDSPQKPPPTPMF |
| | | l | | | | ASRPITRLKPRRAPSEEGIORLK |
| | | | | 1 | | KIGMVEWISHFRPTPLSMEGPE |
| | | 1 | | | | HILLTNTLLNRYVKAAPASLKS |
| | | 1 | | | | PLTALLFMSDLTVGTTFSQLQN |
| 1 | | 1 | ł | | | LNTMGIFGSSCDRSQVAALNHQ |
| | | | | l | İ | ROVPELIIGIDILSSWONPHIGSL |
| | | | | l | | NGRGYINSLALCHNLIRRDLDR |
| 1 | 1 | 1 | | | | FLLPODITLVHYIDHIMRLDSVK |
| 1 | | 1 | | 1 | | DKWLHLAPPTTKKEAQCLVGL/ |
| | | | | | | |
| | | 1 | | | | FGFWRQHIS\LWRQPLACYWAL |
| | 1 | | | | | VETEHLTMGHQVTMQPELPIM |
| | | | | | | NWLLSDPSSYKPAPMASWGVP |
| | 1 | 1 | | | | YGQLTEEEKTRAWFTDGSARY |
| 1 | 1 | 1 | | | | TETTRKWTAVAIQPLSRTSLKD |
| | | 1 | 1 | | | SNEGKSSHQQAKNGITVLAGVI |
| | 1 | | 1 | l | | DPDYQDEISL/LTPQWRCHPGSS |
| | | _ | | | | VWRASSLGISHPP |
| 6125 | 36493 | A | 6174 | 114 | 1996 | |

| SEQ ID NO: | SEQ ID NO: of peptide sequence | Met | SEQ ID NO: in USSN 09/540,217 | Nucleotide location of first codon for peptide sequence | Nucleotide location of last codon for last amino acid of peptide sequence | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
|---------------|--------------------------------------|-----|-------------------------------------|--|---|--|
| 6126 | 36494 | A | 6175 | I | 475 | MGRNQNRKAENSKNWNASSP KEHNSSPAREQNWREDEFNELT EVGFRRSVITNFSDLKEHVLTH CKEAKILEKRLDKWLTKITSVE KS/CK*PDG/J**KPQYENFMKHT QASIADLIKRKKRYQ**LKIKLM K*SKKTR**EKKYKLPSENTTN |
| | | 1 | | | | TSMQIY |
| 6127 | 36495 | A | 6176 | 179 | 393 | NKRGYKQMEEHSMLMDKKNQ YYENGHTAQGN*AGEGNKGYS IRKTGSQIVPLCR*HDCISRKPD CLSPKSP |
| 6128 | 36496 | A | 6177 | | 710 | IAARELRDECTSFSSOFHQLEER VSVIEDDMNEMKQEEKFREKGI KRSEQSLQEIWDYMERPNLCLI GVPESDGENGIKLEDTLQDIIGK DFPNLGROANIQQEIGRMPQR YSSRRATPRHIVERTTKEIQTTIR EYYKHLYANKLENLEEMDKFL DTYTLPRLNQEEVESLNRPITGS EIEAIINSLPTKKSPRPDGFTAEF GIEPAISTENSFYEASIILIPKLGRDTTK KENFRPISAINIDAKILNKILAN QMQNIKNLIRHDQAGFIPGMQ CWFNIRKSINVIQHINISTROKN HMISIDAEKAFYKIQOPFILKT NKLENKIPRNPTKYKGEGPJEK ENYKLIMLKAFAYKIQOPFILKTL NKLENKIPRNPTKYKGEGPJEK ENYKLIMLKAFAYKIQOPFILKTL NKLENKIPRNPTKYKGEGFILKTL NKLENKIPRNPTKYKGEGFILKTL NKLENKIPRNPTKYKGEGFILKTL NKLENKIPRNPTKYKGEGFILKTL NKLENKIPRNPTKYKGEGFILKTL NKLENKIPRNPTKYKGEGFILKTL NKLENKIPRNPTKYKGEGFILKTL NKLENKIPRNPTKYKGEGFILKTL NKLENKIPRNPTKYKGEGFILKTL NKLENKIPRNPTKYKGEGFILKTL NKLENKIPRNPTKYKGEGFILKTL NKLENKIPRNPTKYKGEGFILKTL NKLENKIPRNPTKYKGEGFILKTL NKLENKIPRNPTKYKGEGFILKTL NKLENKIPRNPTKYKGEGFILKTL NKLENKIPRNPTKYKGEGFILTN VERNYKLENKIPRNPTKTTLEENL ONTIGDIGMGKDEMKYPKAM TURNSWIKGLNVPRKTITCHEENL ONTIGDIGMGKDEMKYPKAM TURNSWIKGLNVPRKTITCHEENL ONTIGDIGMGKDEMKYPKAM TURNSWIKGLNVPRKTITCHEENL ONTIGDIGMGKDEMKYPKAM TURNSWIKGLNVPRKTITCHEENL ONTIGDIGMGKDEMKYPKAM TURNSWIKGLNVPRKTITCHEENL ONTIGDIGMGKDEMKYPKAM TURNSWIKGLNVPRKTITCHEENL ONTIGDIGMGKDEMKYPKAM TURNSWIKGLNVPRKTITCHEENL ONTIGDIGMGKDEMKYPKAM TURNSWIKGLERFGSI |
| 6129 | 36497 | Α | 6178 | 464 | 724 | IGEVLLDNILQRVFQLGSILPITF RYTNQT*IWSWTLFWLVSY |
| 6130 | 36498 | A | 6179 | 1 | 2022 | |
| 6131 | 36499 | A | 6180 | i | 882 | |
| 6132 | 36500 | c | 6181 | i i | 1935 | |
| 6133 | 3650I | Ā | 6182 | i | 672 | |
| 6134 | 36502 | В | 6183 | 140 | 2195 | |
| 6135 | 36503 | A | 6184 | 26 | 354 | |

| peptide juence | | SEQ ID NO: in USSN 09/540,217 | location of first codon for peptide sequence | cedon for last amino acid of peptide sequence | Amino add sequence (Netluknown, "Stop ordon," possible nucleotide deletion, "possible nucleotide insertion) SLEDAMSLKDDDSGDHDQNEE NSTQKDGEKEKTERDKNQSSS KRKAVPVGPAEHPLQYNYTTW SSRTPGRBPTSGSVEQNIKQIG TFASIVEQFWRFYSHMVRPGDL TGHISDFHLFKEGIKPMWENDDA KNKOGKWHRLAKKGFGSRCW |
|---|--|---|---|---|--|
| | A | | sequence | | SLEDAMSLKDDDSGDHDQNEE NSTQKDGEKEKTERDKNQSSS KRKAVVPGPAEHPLQYNYTFW YSRRTPGRPTSSQSYEQNIKQIG TFASIVEQFWRFYSHMVRPGDL TGHSDFHLFKEGIKPMWEIDDA |
| 504 . | Α | 6185 | <u> </u> | 747 | NSTQKDGEKEKTERDKNQSSS KRKAVVPGPAEHPLQYNYTFW YSRRTPGRPTSSQSYEQNIKQIG TFAS\VEQFWRFYSHMVRPGDL TGHSDFHLFKEGIKPMWE\DDA |
| 504 | Λ | 6185 | 86 | 747 | NSTQKDGEKEKTERDKNQSSS KRKAVVPGPAEHPLQYNYTFW YSRRTPGRPTSSQSYEQNIKQIG TFAS\VEQFWRFYSHMVRPGDL TGHSDFHLFKEGIKPMWE\DDA |
| 504 | ^ | 6185 | 86 | 747 | NSTQKDGEKEKTERDKNQSSS KRKAVVPGPAEHPLQYNYTFW YSRRTPGRPTSSQSYEQNIKQIG TFAS\VEQFWRFYSHMVRPGDL TGHSDFHLFKEGIKPMWE\DDA |
| | | | | | KRKAVVPGPAEHPLQYNYTFW YSRRTPGRPTSSQSYEQNIKQIG TFAS\VEQFWRFYSHMVRPGDL TGHSDFHLFKEGIKPMWE\DDA |
| | | | | | YSRRTPGRPTSSQSYEQNIKQIG TFAS\VEQFWRFYSHMVRPGDL TGHSDFHLFKEGIKPMWE\DDA |
| | | | | | TFAS\VEQFWRFYSHMVRPGDL TGHSDFHLFKEGIKPMWE\DDA |
| | | | | | TGHSDFHLFKEGIKPMWE\DDA |
| | | | | | |
| | | | | | NENC/CEMINDIAPEGEGERCIM |
| | | | | | HAVIAGOE MAINTENANCE OBLICAM |
| | | | | | ENLILAMLGEOF\MVGEEICGG |
| | | | | | CGVCPAFQEDIIS\IWNKTASDQ |
| | | 1 | | | ATTARIRDTL\RRVL\NLPANTI |
| | | | | | MEYKN |
| 505 | Ā | 6186 | 23 | 127 | |
| | | 6187 | 2 | 419 | |
| | | | | | |
| | | | | | AVFFFFFFFFFFFFFFFFFFF |
| 300 | ^ | 0102 | 1,7 | [575 | FFFFFFFFFFSSSSSSFFFFSFFL |
| | | | | | FFFFKLKELRLVI*PLNPEN*ESC |
| - 1 | | 1 | | | PLFSPVNLDMP*TFKDKRWKV |
| ŀ | | | | | NWARSTSROOLLESARTKSWA |
| | | | | | EREGGTRWRAW |
| 500 | | (100 | 227 | 420 | KNFLPNCSAKELFFFFFFFFFF |
| 509 | A | 6190 | 221 | 420 | LLLLLLYFKF/MI*WFYKHLAF |
| | | | | | PLLAFILSPTAL*RGVFHH |
| -10 | | (101 | 400 | 500 | PLLAFILSPIAL-ROVFHH |
| | | | | | |
| | | | | | |
| 512 | A | 6193 | 2 | 109 | FTFWHDFAAAGTGCSFPCLVLP |
| | | | | | SWW*QNLSAFACL |
| 513 | A | 6194 | 110 | 377 | QWISRQKPYKPEKRGDQYSTFL |
| | | 1 | | | *EC*ILVPPLFWLVGFLPRDPLL |
| 1 | | | | | V*WAYGCP*HFFLHFNLGESNN |
| | _ | | | | YVSWGCSS |
| | | | 1. | | |
| | | | | | |
| | Α | | | | |
| | | | | | |
| 0.10 | | | 1 | | |
| 519 | Ā | 6200 | 716 | 1001 | SMPASTHLILVGSCSWKMVIVL |
| | | | | | PLVTHFLFTALTVPWNLPWVEL |
| | | | | | YWNM*TM*LRSMKESLMATIF |
| | | | | | TLPELKA\VLHEKLQ*LQSTEDL |
| | | 1 | | | *HGLLGG |
| 520 | Ā | 6201 | 5772 | 5971 | TANIIMTGSNSHITILTLNVNRL |
| | | | | 1 | NARIKRHRLENCIKSODPSVCCI |
| | | | | | *ETHLMCRDTYRLKIKGWSN |
| 521 | A | 6202 | 1 | 974 | |
| | | | 1 | | |
| 5 | 107 108 110 111 112 113 115 116 117 118 119 119 | 107 A 108 A 109 A 100 A 100 A 101 A | 107 A 6188 108 A 6189 109 A 6190 110 A 6191 111 A 6192 112 A 6193 113 A 6194 115 A 6196 116 A 6197 117 A 6198 118 B 6199 119 A 6200 | 107 | 100 |

| SEOID | SEO ID NO: | Tatas. | SEO ID NO: | Nucleatide | Nucleotide Insetion of last | Amino acid sequence (X=Unknown, |
|-------|------------|----------|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | İ | sequence | | |
| 6155 | 36523 | IA. | 6204 | 51 | 424 | MAPKODPKPKFQEGERVLCFH |
| 0133 | 30323 | ^ | 0204 | [31 | 424 | GPLLYEAKRVKVAIKD/ITREI/H |
| | | l | | ł | | SYITVVGIKIGMNGFRRAKYSN |
| 1 | | ĺ | | | | TWTPICRNSENFKKPISKFVL*T |
| | | l | 1 | | | EY*GEMPVD*FWTWNEOWRSC |
| | | | | | | WLPCLYNDTSDLSAGV |
| 6156 | 36524 | A | 6205 | h | 3827 | MOKAIRLNDGHVAPLGLLARK |
| 0130 | 30324 | A | 0205 | l' | 3821 | |
| 1 | | l | l | | ł | DGTRKGYLSKRSSDNTK WQTK |
| | | | | | | WFALLQNLLFYFESDSSSRPSG |
| 1 | | l | İ | | | LYLLEGCVCDRAPSPKPALSAK |
| | | ł | | | | EPLEKQHYFTVNFSHENQKALE |
| | | | | | | LRTEDAKDCDEWVAAIAHASY |
| | | | | | | RTLATEHEALMQKYLHLLQIVE |
| | | | | | ì | TEKTVAKQLRQQIEDGEIEIERL |
| | | | Ì | | | KAEITSLLKDNERIQSTQTVAPN |
| | | | | | | DEDSDIKKIKKVQSFLRGWLCR |
| | | l | | | | RKWKTIIQDYIRSPHADSMRKR |
| | | | | | | NQVVFSMLEAEAEY |
| 6157 | 36525 | Α | 6206 | I | 900 | |
| 6158 | 36526 | С | 6207 | 172 | 501 | |
| 6159 | 36527 | A | 6208 | 499 | 848 | KIRVPAAVAGLSPPLGPWSLRS |
| | | | | | | PSQPERCCPWRNSSWWTAPRTS |
| | | | ł | | | IITAAKGVSPARLSSISCTTRGS |
| | | | | | | WVKTPTPTRARMVIASSNLERP |
| | | | | | | SALSRM*PTSQSMTRKRWWRL |
| | | <u> </u> | | | | WPSTTL |
| 6160 | 36528 | A | 6209 | 3 | 495 | SCAQTFPKLDTFLEHIKSHQEEL |
| | | | | | | SYRCHLCGKDFPSLYDLGVHQ |
| | | | | ! | | YSHSLLPQHSPKKDNA/CLQVF |
| | | 1 | | | | PCERYLRRHLPTHGSGGRFKCQ |
| | | 1 | | | | VCKKFFRREHYLKLHAHIHSGE |
| | | 1 | | | | KPYKCSVCESAFNRKDKLKRH |
| | | 1 | | | | MLIQYDEVRQGLGMVPGTQKV |
| | | | | | | LNKCFCHNVKKKK |
| 6161 | 36529 | Α | 6210 | 667 | 2142 | |
| 6162 | 36530 | A | 6211 | 1 | 396 | |
| 6163 | 36531 | A | 6212 | 213 | 446 | |
| 6164 | 36532 | Α | 6213 | 101 | 580 | VAGVGSLPRSMEDDAPVIYGLE |
| | | l l | | | | FQARA\LTPQT\AETDAIRFLVG |
| | | ŀ | | | | TQSLKYDNQIHIIDFDDENNIIN |
| | | | | | | KNVLLHQS/AGEIWHISASPADR |
| | | 1 | | | | GVLTTCYNRTSDSKVLTCAAV |
| | | 1 | | | | WRMPKELESGSHESPDDSSSTA |
| | | | 1 | l | | QTL\ELLCHLDNTAHGNMACV |
| | | | | l | | VWEPMGDG |
| 6165 | 36533 | A | 6214 | I | 933 | |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in HSSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | ŀ | sequence | | |
| 6166 | 36534 | A | 6215 | 3 | 404 | RLKEKKLVKEVIAVSCGPAOCO |
| 0.00 | | ` | | ľ | | ETIRTALAMGADRGIHVEVPPA |
| | | | | | | EAERLGPLQVARV/AVVTADLR |
| | | | | | | LNEPCYATLPNIMKAKKKKIEV |
| | | | | | | IKPGDLGVDLTSKLSVISVEDPP |
| | | | | | | QRTAGVKVETTEDLVAKLKEIC |
| 6167 | 36535 | A | 6216 | 1 | 408 | QUITTOVICTE I ESSTANDADIO |
| 6168 | 36536 | Ā | 6217 | 88 | 871 | MADVRVLVAVKRVIDYAVKIR |
| | | | | | | VKPDRTGVVTDGVKHSMNPFC |
| | | | | | | EIAVEEAVRLKEKKLVKEVIAV |
| | | | | | | SCGPAQCQETI\RTALA\MGA\D |
| | | l | | | | RGIHVE\VPPAEAERF/GVPLQV |
| | | | | | | ARVLGOLAKK\EKVDLVLLGK |
| | | 1 | | | | QA\IACTDCNQ\TGQMTAGFLD |
| | | | | | | WPQGTF\ASQVTLEGDKLKVER |
| | | 1 | | | | EIDGGLETLRLKLPAVVTADLR |
| ļ | | 1 | 1 | | | LNEPRYA\TLP\NIMKAKKKKIE |
| | | l | | l | | VIKPGDLGVDLTSKLSVISVEDP |
| | | l | | l | | PORTAGVKVETTEDLVAKLKEI |
| 6169 | 36537 | A | 6218 | 1 | 1023 | I QKING TKYEI IEBETAKEKEI |
| 6170 | 36538 | Α | 6219 | 110 | 842 | |
| 6171 | 36539 | Α | 6220 | I | 122 | |
| 6172 | 36540 | Α | 6222 | I | 1257 | MNDATAVQEGSQMYSWQKLT |
| | | l | | l | | PTGPFIMQPEGMGRLFAINKMA |
| | | | | | | EGPFPEHYEPIETPLGTNPLHPN |
| 1 | | | | ŀ | | VVSNPVVRLYEQDALRMGKKE |
| | | 1 | | ł | | QFPYVGTTYRLTEHFHTWTKH |
| | | | | | | ALLNAIAQPEQFVEISETLAAAK |
| | | 1 | | | | GINNGDRVTVSSKRGFIRAVAV |
| | | | | ŀ | | VTRRLKPLNVNGQQVETVGIPI |
| | | 1 | | | | HWGFEGVARKGYIANTLTPNV |
| | | l | | | | GDANSQTPEYKAFL/GQHREGV |
| | | l | | | | RN*LHHAAFSGA*LOCFQYAH |
| | | 1 | | | | NSRKNN |
| 6173 | 36541 | Α | 6223 | 737 | 941 | WLRMMEHRILFPLWKRESKKA |
| | | 1 | | | | HYVOSSVLLCLGMLR*KYKGK |
| | | | | | | KGKKERKKKDEKRKGNGKKRI |
| | | | | | | KIHSI |
| 6174 | 36542 | Α | 6224 | I | 1072 | |
| 6175 | 36543 | Α | 6225 | 1 | 585 | |
| 6176 | 36544 | A | 6226 | 1 | 930 | |
| 6177 | 36545 | A | 6227 | 28 | 392 | AGEVPLQLPPAAVCSACLQRPA |
| | | | | | | LWWNSSFFL*SCLHALFH*VDL |
| | | 1 | | | | QSLIAFLLLD*SSY*YLCMLHEV |
| | 1 | 1 | 1 | l | | LVLCFSAPSGHLCSSLS*LF*LAI |
| 1 | | 1 | l | | 1 | HLTFFQGS*LPCIGLEHASLAQR |
| | | L | | | | SLLLPTF |
| 6178 | 36546 | Α | 6228 | 1 | 271 | SAIVTFVCFMKFSCCVFQLHQV |
| | | | l | | | FHVL\FKLVILVSSSCNLFSRFLA |
| | | | 1 | | 1 | SLHWVTTCSFSSEEFVITHLLKP |
| 1 | | 1 | | [| | APVNSSNSFSVQFCSLAGKEL |

| SEO ID | SEO ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | 1 | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 6179 | 36547 | Α | 6229 | 11 | 1089 | MGWRPRWLPYLYWGFOSDLC |
| | l . | | | | | PHCKRKAQEEDSLAAQAASHP |
| l | l | | | | | RLSANSKNNSWGKOYSYALFK |
| | | ŀ | | | | AMRHMLCIGYGRQAPAAVSDV |
| | | | | | | WLTMLSM\IVGATCYAMFIGH/ |
| | | | | | | ATALIQVLDCSRRQYQEKVVLP |
| | | | | | | REHPNIGSSQEGGTWHQTVGL |
| | | | | | | QQTSDKFDANDPILKDQTQEW |
| | | 1 | | | | SGSATFTSDGKIRLFYTDYSGK |
| | | | | | | HYGKQSLTTSAANTGTENGYQ |
| | | 1 | | | | GEESLFNKAYYGGGTNFFRKES |
| | | ı | | | | QKLQQSATTRDAELANGALGII |
| | l | l | | | | ELDNDSPLKKRGATQRSSEENI |
| | | l | | | | TLKAYKRDVRSLLMLTRNEDV |
| | 1 | | | | | ADSLNSSKKRQNYQLPSIRSVT |
| | | 1 | | | | RCKKIGVCAKGIGCGQGTHYLS |
| | | | | | | VSILNTADRDRRKLGFTRTSMY |
| 6180 | 36548 | В | 6230 | 1 | 1140 | |
| 6181 | 36549 | Α | 6231 | 3 | 204 | GSDYELGLW*PWLTSEATDLH |
| | | | | 1 | | GECYSS*SGASGVVRSSLWARG |
| 1 | | | | | 1 | LAGFRSEAADLRGRESVAVTN |
| 6182 | 36550 | Α | 6232 | I | 1296 | |
| 6183 | 36551 | В | 6233 | 1 | 1686 | |
| 6184 | 36552 | Α | 6234 | I | 627 | |
| 6185 | 36553 | A | 6235 | 570 | 736 | SATFGRSSRSGCSG\FPAASRRG |
| | | | | | | RLPLSPPPWPAV\RVYPCGMLD |
| | | Ļ. | | | | NKASAAHPPKKK |
| 6186 | 36554 | A | 6236 | 11 | 103 | OLODO A PROPERTO MATERIA MATERIA |
| 6187 | 36555 | A | 6237 | 699 | 887 | GLQPPAPRETRPLY*TLAWNLH |
| | | | | | | FLFVSPLDSCDLVRSVLTCLSPP |
| 61.00 | 0.000 | ļ. | (222 | - | 803 | GNSPSFDMHRYQLPCVH |
| 6188 | 36556 | A | 6238 | 2 | 1277 | YKETYLIHLFHTFTGLSIAYFNF |
| 6189 | 36557 | A | 0239 | 2 | 12// | GNQLYHSLLCIVLQFLILRLMG |
| | | | | | i | RTITAVLTTFCFQMAYLLAGYY |
| ļ. | | 1 | | | i | YTATGNYDIKWTMPHCVI.TLK |
| | | | 1 | | | LIGLAVDYFDGGKDQNSLSSEQ |
| | | 1 | | | | QKYAIRGVPSLLEVAGFSYFYG |
| | | | | | | |
| | 1 | | | | | AFLVGPQFSMNHYMKLVQGEL IDIPGKIPNSIIPALKRLSLGLFYL |
| | | | | | | VGYTLLSPHITEDYLLTEDYDN |
| | | 1 | | | | |
| | 1 | | | | 1 | HPFWFRCMYMLIWGKFVLYKY |
| | | 1 | | 1 | | VTCWLVTEGVCILTGLGFNGFE |
| 1 | | 1 | | | 1 | EKGKAKWDACANMKVWLFET NPRFTGTIASFNINTNAWVARYI |
| 1 | 1 | 1 | | 1 | l | |
| l | 1 | 1 | | | | FKRLKFLGNKELSQGLS\MLFLF |
| 1 | 1 | 1 | | | | LWHGLHSGYLVCFQMEFLIVIV |
| 1 | 1 | | 1 | 1 | | ERQAARLIQESPTLSKLAAITVL |
| | 3 | | | | | QPFYYLVQQTIHWLFMGYSMT |
| | 1 | | | | | AFCLFTW\DKWLKVYKSIYFLG |
| ı | 1 | 1 | 1 | 1 | 1 | HIFFLSLLFILPYIHK\AMVPRKE |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nuclcotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|----------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nuclcotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 6190 | 36558 | A | 6240 | 56 | 324 | |
| 6191 | 36559 | Α | 6241 | 68 | 487 | |
| 6192 | 36560 | Α | 6242 | 52 | 457 | |
| 6193 | 36561 | Α | 6243 | 263 | 787 | SLEV*KWPGVACRLQL*P/MVP |
| | | | | | | APKS*ESKSAGSLNTPSAICRDA |
| | i | | | | | SGRGLARPWLRKSKCLACHLV |
| | | | | | | DTRSKTAGGLAPVPSAHLISVR |
| | | i | | | | EREPGLCAVLVSQLEFRVGVGL |
| | | | | | | VGPTLGARREPCWPQAMGDLA |
| | 1 | | | | | PEPVAALRLISRRALPAFPWGR |
| | | i | | | | ARDLQPAMPEPPTHSMGSCAPE |
| | | 1 | | | | PPR |
| 6194 | 36562 | Α | 6244 | 3 | 236 | |
| 6195 | 36563 | С | 6245 | 1 | 1608 | |
| 6196 | 36564 | В | 6246 | 1 | 1083 | |
| 6197 | 36565 | A | 6247 | 823 | 1055 | KQKDGTGAPWSRGRRSSGRLG |
| | | | | | | THRSPRRGWEAQAWRAAGPET |
| | | | | | | CPAGRQLRPGEKSSAAPG*RSR |
| | | | | | | RKDAYEMDTAKKK |
| 6198 | 36566 | В | 6248 | 1 | 390 | |
| 6199 | 36567 | A | 6249 | 27 | 363 | |
| 6200 | 36568 | В | 6250 | 1132 | 1268 | |
| 6201 | 36569 | A | 6251 | 11 | 489 | |
| 6202 | 36570 | A | 6252 | 356 | 638 | |
| 6203 | 36571 | A | 6253 | 1 | 507 | |
| 6204 | 36572 | A | 6254 | 80 | 336 | |
| 6205 | 36573 | В | 6255 | 100 | 912 | |
| 6206 | 36574 | В | 6256 | 821 | 2992 | |
| 6207 | 36575 | A | 6257 | 2 | 602 | |
| 6208 | 36576 | Α | 6258 | 1 | 519 | |
| 6209 | 36577 | A | 6259 | 3 | 228 | STGVPVSQ\RTCLLEKASVLFNT |
| 1 | | | | | | GALYTQIGTRCDRQTQAGLESA |
| | | | | | | IDAFQRAADMSPPGLTRRSLGP |
| (210 | 0.6570 | ١. | (2(0 | | 0.02 | TRWHQGTPH |
| 6210 | 36578 36579 | A | 6260 | 1 | 963 | |
| 6212 | 36580 | | 6262 | 1 | 397 | |
| 6212 | 36581 | A | 6263 | 1 | 2625 | |
| 6214 | 36582 | A | 6264 | 11 | 2623 | SLOHLNPATFLPVSKSPVKHNC |
| 6214 | 36582 | A | 6264 | 11 | 241 | VEVLDSVYSSGPNHRDHP*TSV |
| | | 1 | | | | |
| | | 1 | | | | DWELYMDGSSFTNPCKVTLKK |
| 6215 | 36583 | A | 6265 | 1 | 1662 | TTSPAPVTPGS |
| 6216 | 36583 | B | 6266 | 1 | 897 | |
| 6217 | 36585 | A | 6267 | 3 | 258 | |
| 6217 | 36586 | A | 6268 | 1 | 279 | |
| 6219 | 36587 | A | 6269 | 1 | 258 | |
| 6220 | 36588 | A | 6270 | 1 | 639 | |
| 6221 | 36589 | В | 6271 | li . | 1935 | |
| 6222 | 36590 | A | 6272 | 698 | 1643 | |
| 0222 | 130390 | Ι^ | 10212 | 1070 | 11043 | |

| SEO ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|----------|------------|-------------------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleoride |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 6223 | 36591 | Ā | 6273 | 91 | 386 | IFDFLFLLYVSGCNS1AEPOHFT |
| | | | | | | TTVTRCSPTVAFVEFPSSPOLKN |
| | | l | | | | DVSEEKDQK\KP\ENEMSGKGG |
| | | 1 | | | | SWVLFTKGEVQEWRESGLNPT |
| | | | | | | KFNMGPLIYS |
| 6224 | 36592 | Ã | 6274 | 1 | 2538 | |
| 6225 | 36593 | Α | 6275 | 1 | 471 | |
| 6226 | 36594 | Α | 6276 | 152 | 520 | CPLTLLLPSRGAGLGTCSPPCLS |
| | İ | | | | | LPPTPWAPVRPEPPRRAPPPAPR |
| | 1 | | | | | RPVPSTGKEQTTQGLRNASARR |
| | | 1 | | | | GTGRQLHL\SPGVGSTG*SQGL |
| 6227 | 36595 | Α | 6277 | 831 | 1449 | HPGQWLRRVCWVSSGAGPLAL |
| | | l | | | | CSISCPALAAFPRVGLGTCSPPC |
| | 1 | l | | | | LSLPPTPWAPVRPEPPRRAPPPA |
| | | l | | | | PR/PPSPIDHPRAEEYE/PHGAGL |
| | ļ. | | | | | AGSSTCSPSAESTG*SQLGS*VV |
| | | | | | | RVRGFILEVSETKNPPIPDTFGL |
| | ŀ | 1 | | | | PPGSSSAASTLVQVTRL*ISAISL |
| | 1 | 1 | | | | PHLLSRPCSNTARGPVPAPVPG |
| | | 1 | | | | AAVRAPAAGGRWCGGARGRG |
| | | 1 | | | | RRGGGH |
| 6228 | 36596 | С | 6278 | I | 426 | |
| 6229 | 36597 | Α | 6279 | I | 535 | MKHSGAQLASPSGS\PLGPQVE |
| | | l | | | | LPASPVPCACTSQPLGGRWDW |
| | 1 | | | | | APWSRGWCSSGRLGPHRSPWS |
| | 1 | l | | | i | GWE\LRHGGLQVPSPAPREGS* |
| | 1 | l | | | | GPARNP/GTAPGRPAAPS\GGPP |
| | 1 | l | | | | SPRPPRTPAGPQALRAAPVP\LA |
| | 1 | 1 | | | | PLPPHLPAS*GSGLQPWPA*KE |
| | | 1 | | | | APTVQCQAEGLLKCRQSGSPGR |
| | | | | | | GGAESE |
| 6230 | 36598 | В | 6280 | I | 1743 | |
| 6231 | 36599 | Α | 6281 | I | 428 | GTREEHLKRSGREIALPIEACV |
| | 1 | | | | | MLLLETGMKEEGLFRIGAGASK |
| | 1 | 1 | | | | LKKLKAALDCS\ILTWDEFYSD |
| | 1 | 1 | | | | PHAVAG\ALKSYLRELPEPLMT |
| | | 1 | | | 1 | FNLYEEW\AQVASVQDQGQKT |
| | | 1 | | | | FKDLWRTCQKLPPQNFVNFRY |
| | L | L. | - | L | | LIKFLAKLAQTSDV |
| 6232 | 36600 | Α | 6282 | 135 | 512 | LPFRGAGLETCSPPCLSLPPPPW |
| | 1 | | | | l | APVRPKPPR*APPPAPRRPVPST |
| | 1 | 1 | 1 | | I | TQGSLGPHCFYEL*HSP*RSAAS |
| | 1 | 1 | | | l | LLKPARP*AHREERTTP/GRSAL/ |
| | 1 | 1 | | | İ | TSCNTHREGLQ/PSLRKKETPNT |
| | | <u> </u> | <u></u> | | L | SEHQKEQTPDAPP |

| SEO ID | ISEO ID NO: | Talat | SEO ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|-------------|-------|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \-possible nucleotide insertion) |
| | | | | sequence | | |
| 6233 | 36601 | ĪĀ. | 6283 | 698 | 2233 | IQAAMQAAPQFGPSTED*CCPIT |
| 0233 | 50001 | ľ. | 0203 | 10,0 | | SEAPWAIMDAKLR\LKPPSHPPL |
| | | | | | | VSPHLNPQVWDTSSPSLATEHA |
| | | | | | | SLTISLKPNHPYPAQSQYSIPOH |
| | | l | | | | ALKGSKPVITRLLEHGLLKPINS |
| | | 1 | | | | |
| | | | | | ŀ | PYNSPILPVQKLDKSYRLVQHL |
| | | | | 1 | | CLIYQIVLPIHPMVPNPYTLLSSI |
| | | 1 | | | ŀ | PFTTHYSVLDLKHAFFTIPLYPS |
| İ | 1 | 1 | | 1 | | SQPLFAFTWTDPDTHQAQQITL |
| | | | | 1 | | AVLPQCFIDSPHYFSQAQISSSS |
| | | l | | 1 | | VTYLGIILMKTHIGLGAVEQGV |
| ļ | | | | | | VLVGEARAAQEPMEWVGGSG |
| ł | | | | | | MVGCRSRALPRGKAAKARREI |
| | | l | | | | ERSAVTIVPVLDFNPAFHIIPDTT |
| 1 | ŀ | | i | 1 | İ | PDHHDCISLIHLTFTPFPHISFFP |
| | | | | | | VPHLEHTWFIDGSSTRPNCHSP |
| l | | 1 | | | i | AKAGYAIVSSTSIIEATALPRST |
| | | 1 | | | | TSQQAKLIAYTDSKCAFHILHH |
| | | l | | | | HAVIWEERNFLTMQGASIINAF |
| | | l | | | | LIKTLLKDILLPKEAGVIHCKGH |
| | | | | | | QKASDPITQDNAYADKVAKKQ |
| | | | | | | LAFOLLSLTAVFLLLIRPLSPTSP |
| | | | | | | LKLPLINLFPHKANDS |
| 6234 | 36602 | Α | 6284 | I | 1239 | |
| 6235 | 36603 | Α | 6285 | 1 | 477 | QRPPHGVFVLGVAGRVHGPEL |
| | | | | | | ASHKAGPQLGDVGVCAGQGG |
| | | | | | | QVGPLVLQPVVEHIQQLPG/AG |
| | ľ | 1 | | | | HCAHQ*QGSPS*SSLPRPERSLQ |
| | | 1 | | | | CRRPQGATATIRSTWWGPRGP |
| i | | 1 | | l | i | VCTAALVPLCWPGWPVQKDEL |
| | | | | | | QAVRSHSALASAMQTCSLAGP |
| | | l | | | | GLGSSHARLTA |
| 6236 | 36604 | Α | 6286 | 1 | 1134 | |
| 6237 | 36605 | Α | 6287 | 673 | 836 | |
| 6238 | 36606 | A | 6288 | 1 | 225 | |
| 6239 | 36607 | A | 6289 | 1 | 468 | |
| 6240 | 36608 | Α | 6290 | 495 | 1637 | ESQVLSNVSPHVKV*NMASWE |
| | | | | | | GKDLTVPQPDTRKGSVLRRISK |
| 1 | | | | | | RGRNASCS*DKRKASVSCLSLG |
| ļ | | | | | | NGMSRYKTRLYAPSTEIGKNRL |
| | | | | | | RAGGGTCGQQYCFVKH |
| 6241 | 36609 | Α | 6291 | 1 | 507 | |
| 6242 | 36610 | A | 6292 | 215 | 389 | |
| 6243 | 36611 | A | 6293 | 1 | 255 | |
| 6244 | 36612 | В | 6294 | 69 | 1055 | |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------------------|---------------------|--|
| NO: | of peptide | hod | in USSN | location of first | | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 6245 | 36613 | A | 6295 | 23 | 1596 | IKPQRWGETRAEMLKILKTREP |
| | | | | | | FLLQRIASPRQQWNKAGQRRS |
| | | | | | | WFFERL/NKIDRLLARLIKKKRE |
| | l | | | | | KNQIDAIKNDKGDITTDPTEIQT |
| | | | | | | TIREYYKHLYANKLENLEEMD |
| | 1 | | | | | KFLDTYTLPRLNQEELESLNRPI |
| | l | ŀ | | | | TGSEIEAHSSLRTKKSPGPDGFT |
| | | | | ł | | AEFYQRYKEELVLFLLKLFQSIE |
| | | | | ļ . | | KEGILPNSFYEASIILIPKPGRDT |
| | İ | | | | | TKKENFRLISLMNIDVKILNKIL |
| | | | | | | ANRIQQHIKKLVHHDQVGFIPG |
| | | | | | | MPDWFNICKSINIIHHINRTNGK |
| | 1 | | | | | NHMIISIDAEKAFEKIQQCFMLK |
| | 1 | ! | | | | TLNKLGIDGMYLKIIRAIFDKPT |
| | 1 | | | 1 | | ANVILNGQKLEAFPLKTGTTQG |
| | | | | | | CPLSPLLFKIVLEVLARAIRQEK |
| | | | | i | | EIKRIQLGKEEAKLSLFADDMIV |
| | 1 | | | ĺ | | YLENPIVSAQNLLQLRSNFSKV |
| | | l | | | | LGYKINMQKSQAFLYTKNKQT |
| | | 1 | | | | ESQIMSELPFTIATKRIKYLGIQL |
| | | 1 | | | | TRDVKSLFKENYKPLLSKIKED |
| | | 1 | | | | TNKWKNIPSSWIGRISIAKMAIL |
| | | | | | | PKVIYTFNAIPIKLPMTFFTELEK |
| 6246 | 36614 | Α | 6296 | 1 | 1488 | |
| 6247 | 36615 | Α | 6297 | 1 | 1401 | |
| 6248 | 36616 | Α | 6298 | 2 | 1256 | |
| 6249 | 36617 | В | 6299 | 84 | 955 | |

724

| SEQ ID | SEQ ID NO: | Mct | SEQ ID NO: | Nucleotide | | Amino acid sequence (X=Unknown, |
|--------|------------|----------|------------|-------------------------------|---------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | 1 | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | 1 | | Sequence | | |
| 6250 | 36618 | ĪΑ | 6300 | 735 | 2718 | RSFPRSRPSPFLLLSRYLRIHMV |
| | | l | | | | FSVLPFGLQNPKYLLSGSLOEK |
| | | į | | | | FRTPGINSHKTLDPNRVIIKVRR |
| 1 | | l | | | | RLEKEKALRAYVGKSEVRNMI |
| | | 1 | | 1 | | LRERCKL*KKREKNQIDTIKND |
| ŀ | l | [| | | | KGDITTDATEIQTTIREYYKHLY |
| | | l | | | | ANKLENLEEMDKFLDTYILPRL |
| | | i | | 1 | | NQEEVESLNRPITGSEIEAIINSL |
| | | 1 | | | | PTKRSPGPDGFTAEFYQTYKEE |
| İ | | 1 | | | | LVPFPLKLFQSTEKEGILPNSFY |
| | | | | | | EASIILIPKPGRDTTKKENFRPIS |
| | | | | | | LMNIDAKILNKILANRIQQHIKK |
| | | ŀ | | | | LIHYDQVGFIPGMQGWFNKRK |
| 1 | | l | | | | SINVIQHINRTNDKNHMIISIDAI |
| | | | | | | KAFDKIQQPFMLKTLNKLGIDG |
| | | 1 | | | | TYLKVIRAIYDKPTANIILNGQK |
| | | [| | | | LEAFPLKTDTRQGCPLSPLLFNI |
| | | l | | | | VLEVLARAVRQEKEIEGIQLGK |
| | | 1 | | | | EEVKLSLFADDMIVYLENPIVS |
| | | 1 | | | | AQNLLKLISNFSKVSGYKINIQ |
| | | l | | | | SQAFLYTNNRQTESQIMSELPFT |
| | | l | | | | TASKKIKYLGIQLTRDVKDLFK ENYKPLLNEIKEDTNKWKNIPC |
| | | 1 | | | | SWYGRINIMKMAILPKVICRFN |
| į . | | 1 | | | | |
| | | 1 | | | | AIPIKLPMPFFTELETTTLKFIWN |
| | | 1 | | | | QKRARKSILSQKNKAGGITLPD FKLYYKATVTKTAWYWYQNR |
| | | 1 | | | | DIDOWNRTEPSEIMPHIYNYLIF |
| | | 1 | | | | DKPEKNKQWGKDSLFNK*CWI |
| | | | | | | NWLAIWRKLK |
| 6251 | 36619 | В | 6301 | tr - | 2907 | |
| 6252 | 36620 | A | 6302 | 1 | 2358 | |
| 6253 | 36621 | Α | 6303 | 1 | 1866 | |
| 6254 | 36622 | Α | 6304 | 1 | 885 | |
| 6255 | 36623 | Α | 6305 | 1 | 1059 | MKNNSESFEPLLLIPRQRGSGV |
| | | 1 | | | | DLQQTPTDLQLRVLTVRRKTN |
| | | ı | | | | KQDIHTKTPTVRHHHQRPKNP |
| | | 1 | | | | WDTFKAVCRGKFIALNAHKRK |
| | | İ | | | | QERSKIDTLTSQLKEVEKQEQT |
| | ļ | 1 | | | | QSKASRRQEITKIRGELKEIETQ |
| | | | | | | KTLQKINESRSWFFEKINKIDRL |
| | | 1 | | | | LARLIKKKREKNQIDTIKNDKE |
| | | 1 | 1 | | | DITTDSTEIQTTIREYYKHLYAN |
| | | 1 | 1 | | | KLENLEEMDKFLNIYTLPRLNQ |
| | | | | | | EEVESLNRPITGSEIEAIINSLPT |
| | | | 1 | 1 | | KKSPGPDGFTAEFYQSYQEELV |
| | | 1 | 1 | 1 | | PFLLKLFQSIEKEGILSNSFYKA |
| | | | 1 | 1 | | NIILIPKPGRDTTKKENFRPISLM |
| | | | 1 | 1 | | NIDAKILNKIL/ANRIQQHIKKLI |
| | | ! | | ļ | 1.00 | HHDQVGFIPGMQGWFNI |
| 6256 | 36624 | Α | 6306 | 1 | 1692 | |

| SEQ ID | | | SEQ ID NO: | | | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------------------|---------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 6257 | 36625 | В | 6307 | I | 2871 | |
| 6258 | 36626 | A | 6308 | 2 | 2315 | |
| 6259 | 36627 | Α | 6309 | ı | 1210 | MMSFHELSVHTAIDGHSHSSCS |
| | | | | | | AWCSPIDRDYFEQENNSSSSCC |
| | | | | | | CCCYHCHRKHCGGKGLSFPGE |
| | | | | | i | MPLSPGHFNKMMYSVSELMQG |
| | | | | | | SGSGTFIPLPAELSLWLLVTNTK |
| | | | | | | GQRMIKNDAEIQTTIREYYKHL |
| | | | | | | YANKLENLEEMDKFLDTYTLP |
| ŀ | | | | | | RLNQEEVESLNRPITSSEIVAIIN |
| | | | | | | SLPTKKSPGPHGFTAEFYQRYK |
| | | | | | | EELVPFLLKLFQSIEKEGILPNSF |
| l | | | | | | YEASIILIPKPGRDTTKKENFRPI |
| | | | | | | SLMNSDAKILNKILANRIQQHIK |
| | | l | | | | KLIHHDQVGFIPGMQGWFNICK |
| | | | | | 1 | SINVIQHINRTKDKNHMIISIDAE |
| | | 1 | | ŀ | | KAFDKIQQPFMLKTLNKL\GIK |
| | | | | | | YLGIQLTWDVKDLFKENYKPL |
| | | | | | | LKEIKEDTNKWKNIPCSWVGKI |
| | | | | | | NIMKMAIPPKATSPLESYKREK |
| 6260 | 36628 | A | 6310 |) 1 | 2745 | MEGEMNEMKREGKFREKRIKR |
| | | | | | | NEQSLQEIWDYVKRPNLRLIGV |
| | | | | | | PESDGENGTKLENTLQDIIQENF |
| | | | | | | PNLARQANVQIQEIQRTPQRYS |
| | | | | | | SRRATPRHIIVRFTKVEMKEKM |
| | | | | - | | LRAAREKDRSTRQKVNKDTQE |
| | | | | | | LNSALHQADLIDIYRTLHLKSTE |
| | | | | | 1 | YTFFSAPHHTYSKIDHILGSKAL |
| | 1 | | | 1 | į | LSKCKRTEIITNYLSDHSAIKLE |
| | | | | | 1 | LRIKNLTQNRSTTWKLNNLLLN |
| | | | | [| | DYWVHNKMKAEIKMFFETNEN |
| L | | L_ | | | | KDTTYQNLWDTF |

| SEQ ID NO: | SEQ ID NO: of peptide sequence | hod | SEQ ID NO: in USSN 09/540,217 | Nuclcotide location of first codon for peptide sequence | codon for last amino acid of peptide sequence | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
|---------------|--------------------------------------|-----|-------------------------------------|--|--|--|
| 6261 | 36629 | A | 6311 | | | MGDFNTPISTLORSMRQKVNK DTOFELNSALDAOLLIDIYRTLH PKSTEYTFFSAPHHTYSKIDHIV GSKALLSKCKRTEIITTNYLSDHS GSKALLSKCKRTEIITTNYLSDHS AIKLELRIKNITONKSTTWELN NLLLADYWVINEMKAEIKMFA CRGKFVALNAHKRKQEGSKID TLTSQLKELEKQEQTHSKASRR QETIKVRAELKEIETOKTLQKIN ESRSVARLIKKKBEKNOJDAIKN DKRDITIDFTEQTTHEYYKHL YANKLENLEEMDKFLDTYTLP RLNQEEVESLNRPITGSEIVAIIN SLPTKKSPGPGFTAEFYQRYK EELVPFLLKLFOSTEKEGILPNS FVEASILIPKFOROTTKEKSHFAP ISLMNIDAKILNKILAKRIQQHI QKLIHHDQVGFPGMGGWFNIC SKINVQHINKTDKNHMISID AEKVFDKIQQRFMLKTLNKLU EVLARAVROPKKIKGIQLGKE ELKLSLFADDMIVYLENPIVSA QNLLKLISNFSKVSEYKINVQKS QNLLKLISNFSKVSEYKINVQKS QNLLKLISNFSKVSEYKINVQKS QNLLKKLISNFSKVSEYKINVQKS QNLLKKLISNFSKVSEYKINVQKS QNLLKKLISNFSKVSEYKINVQKS WGRINVKMIGUTENDVKDLFKFE WVGRINVKMILPSTPTLASKRIKVLGIQLTRDVKDLFKF WVGRINVKMALPKVIYRFNAI PIKLPMTSFTELEKTTFKFIWMH KGARIAKSILSQKNKAGGITLPD |
| | 1 | 1 | | | | FKLYYKATVTKTAWY |

| SEO ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 1 | | | | sequence | } | |
| 6262 | 36630 | A | 6312 | 2 | 2143 | SSDGSWWTGFQWREWROAGR |
| | | | | _ | | SVNSWDNPKQEVRASSKDKSR |
| | | | | | | GSIQEAMRMQSSAKLLCSAWT |
| | | 1 | | | | LAYSIAVRTLSSDSEGQPPLVIH |
| | | ĺ | | | l | ROTGSGEDLQQTPTDLQLRVLT |
| | | | | | ŀ | IRRKTNKOKGHPHONPISSRRO |
| | | | | | ł | EITKIRAELKKIETOKPFKKINES |
| | | | | | | RSWFFEKINKIDRLLARLIKKKI |
| | | | | | İ | EKNOIDAIKNDKGNITTNPTEIO |
| | | l | | | | TTIREYYKHLYANKLEHLEEM |
| | | | | | | DKFLDIYTLPRLNOEEVESVNR |
| | | | | | | PITGSEIEAIINSLPTKKSPGPDRI |
| | | 1 | | | | TAELYQRYKEELVPFLLKLFQS: |
| | | | | | | EKEGILPNSFYEASIILISKPGRD |
| | | | | | | TTKKENFRPISLMNIDAKILNKI |
| | | | | | | LANQIQQHIKKLIHHHQVGFIPO |
| | | 1 | | | | MQGWFNILKSINVIHHINRTKD |
| 1 | | 1 | | | | KNHMIISIEAEKAFDKIQQPFML |
| 1 | | 1 | | | | KTLNKLGIDGTYLTYLKIIRAIY |
| İ | | 1 | | | 1 | DKPTANIILNGQKLEAFPFKTGT |
| 1 | | 1 | | | | RQGCPLSPLLFNIVLEALARAIR |
| | | 1 | | | ł | QEKEIKGIQLGKEDVKLSLFAD |
| ł | | | | | | DMIVYLENPIVSAQNLLKLISNF |
| | | 1 | | | ŀ | SEVSGYKINVQKSQAFLYTNNR |
| | | 1 | | | | QTESQIMSELPFTIASKRIKYLGI |
| | | | | | 1 | QLTRDVKDLFKENYKPLLNEIK |
| | | 1 | | | | EDTNKWKNIPCSWIGRINIVKM |
| | | | | | | AILPKTLNQKFSYWFRVNKHYI |
| | | | | [| | HQRTFPLKETEFNTIATLYNGA |
| | İ | | | | | SP/CTAPKSTGTNGHQASGLPRF |
| | | | 1 | | | *RIAFCSALVKSKRKLYQGYLP |
| | | L | | | | GQTDRREEGVSWCPGGP |
| 6263 | 36631 | Α | 6313 | 1 | 3018 | |
| 6264 | 36632 | Α | 6314 | 1 | 2016 | |
| 6265 | 36633 | В | 6315 | I | 1215 | |

| SEQ ID | SEQ ID NO: | | | Nucleotide | | Amino acid sequence (X=Unknown, |
|--------|------------|-----|-----------------------|--|--|---|
| NO: | of peptide | bod | in USSN 09/540,217 | location of first codon for peptide | codon for last amino acid of peptide sequence | *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
| İ | sequence | | 09/540,217 | sequence | or pepude sequence | deletion, (-possible intelegrine insertion) |
| | | | | Sequence | | |
| 6266 | 36634 | Α | 6316 | 1 | 2268 | MAGYPSETKPPEERSDSNICSSA |
| | | | | İ | | IFTVLHPPLLIPRQTAFGMDLQQ |
| | | | | l | | MPTDLQLRVLTVKRKTNKQKG |
| | | | | ŀ | | HPHQNPIRTSPSSKTEDFQPTKI |
| | | | | | 1 | KRDKEGHYIMVKGSIQQEELTI |
| | | | | ŀ | 1 | LNIYAPNTGAPRFIKEVLRDLQ |
| | | | | | İ | RDLDSHTIIMGEFNTRLSTLDRS |
| | | | | | | MRQKVNKDIQELNSALHQADL |
| | | | | | | IDISRNLHPKSTEYTFFSAPHRT |
| | | | | | | YSKIDHIVGSKALLSKCKRTEII |
| | | | | | | TKCLSDHSAIKLELRIKNLTQNO |
| | | | | | | STTWKLNNLLLNDYWVHNEM |
| | ļ. | | | | | KAEIKMFFETSENKDTTYQNL |
| | ľ | | | | | WDTFKAVCRGKFIALNAHKRK |
| | | | | | | QERSKTDTLTSQLKELEKQEQT |
| | | | | | | HSKASRRQEITKIRAELQEIETQ |
| | | | | ł | | RTLQKISESRSWFFEKINKIDRS |
| | | | | | | LARLIKKKREKNQIEAIKNDKG |
| | | | | ł | | DITTNPTETQTTIKEYYKHLYK |
| | | | | İ | | NKLENLEEMDKFLNTYTLPRLN |
| | | | | | | QEEVESLNRPITGSEIVAIINSLP |
| | | 1 | | | | TKKSPGPDGFTAEFYQRCKEEL |
| | | | | İ | | VTFLLKLFQSIEKEGILPNSFYE |
| | | | | ŀ | | ASINLIPKPGRDTTKKENFRPISL |
| | | i | | | | MNIDAKILNKILANRI/WGN*AE |
| | | | | ŀ | | ERNKEYSIRKRGSQIVPVCR*H |
| | | | | | | DCVSRKPHHLSPQSP*ADKQLQ |
| | 1 | | | l | | QSLRIQNQCTKITSILIHQ*QTNR |
| | | | | l | | EPNHE*TPIHNCFKENKIPRNPT |
| | | | | l | l | YKGCEGPLQGELQTTAQ*NKR |
| | | | | 1 | | GHKQMEEHSMLMDRKNQHRE |
| | | | | | | NRHTAQGNL*IQCHSHQATNDF |
| 6267 | 36635 | Α | 6317 | 1 | 1797 | |
| 6268 | 36636 | Α | 6318 | 2 | 2063 | |
| 6269 | 36637 | Α | 6319 | I | 1212 | |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|---|
| NO: | of peptide | hod | in USSN | location of first | | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 6270 | 36638 | A | 6320 | 1 | 2718 | MALFRYGMTTRRLGHANKFTR |
| 02/0 | 30030 | ^ | 0320 | l¹ | | DLLVKRLLLYEFVVEIIPGLRTK |
| | | | | | | TILVGPLETGYTSSDSVNSPHF |
| 1 | | | | | | MLDIALSHNVKSTOLLLRPWR |
| | | l | | | | NIDCSRNHKNAKKEEOMGDDE |
| i | | l | | | | INROOECSSSPAMEOSWTENDF |
| 1 | | 1 | | | | DELREEVFRRSNYSELQEEIRTN |
| | | | | | | GKEVKSFEKKLDEWITRITNAE |
| | | | | | | KSLKHLTELKTKARELQLEKQE |
| | | | | | | LTHSKASRROEITKIRAELKEIE |
| | | | | | | TOKTLOKINESRSWFFEKINKID |
| } | | | | | | |
| | | | | | | RPLARLIKKKREKNQTDTIKND |
| | | 1 | | | | KGDIITDPTEIQTTIREYYKHLY TNKLENLEEMDKFLDTYVLPRL |
| | | l | | | | |
| | | | | | | NQEEVESLNRPITGSEIEAIINSL |
| | | l | | | | PTKKSPGPDGFTAEFYQRYKEE |
| | | 1 | | | | LVPFLLKLSQSIEKERILPNSSYE |
| | | | | | | ASIILIPKPGRDTTKKENFRPISL |
| | | | | | | MNIDAKILNKILANRTQQHIKK |
| | | l | | | | LIHHEQVGCIPGMQGWFNIRKS |
| | | l | | l | | INVIQHINRTKDKNHMIISIDAE |
| 1 | | | | | | KLISKFSKVSGHKINVQKSQAF |
| | 1 | 1 | | | | LYTDNRQTESQIMSELPFTIASK |
| | | 1 | | | | RIKYLGIQLTRDVKDLFKENYK |
| | | | | 1 | | PLLNEIKEDTNKWKNIPCSWVG |
| | | 1 | | 1 | | RINIVKMALLP\RFSAIPIKLPMT |
| | | l | | | | FFTELEKTTLKFIWNQKEP/CIA |
| | | | | | | KSFLSQKNKAGGITLPDFKLYY |
| | | | | l | | KATVPKTAWYCYQNRDIDQW |
| | | | | | | NRTEPSEIMLLIYNYLIFDKPDK |
| | | | | | | KKEWGKDSLFNKWCWENWLA |
| L | | L | | | | ICRKLKLDPFLTPYTKMNSRWI |
| 6271 | 36639 | Α | 6321 | I | 2307 | |
| 6272 | 36640 | Α | 6322 | I | 1989 | |
| 6273 | 36641 | A | 6323 | I | 3285 | |
| 6274 | 36642 | Α | 6324 | 3 | 4732 | |
| 6275 | 36643 | В | 6325 | 1 | 2693 | |

| SEO ID | ISEO ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|-------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | 1 | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible oucleotide insertion) |
| | | | | sequence | | |
| 6276 | 36644 | Α | 6326 | 603 | 2976 | DNTARGTIRQQHLLFTNIRCSA |
| | | | | | | ASAADTQANRVWSGPPANSNR |
| | | 1 | | | ŀ | PAA\RVLTVRRKTNKQKGHPH |
| | | 1 | | l | | QNPICTSPSSKTKETQTTIREYY |
| | | l | | I | | KHLYANRLENLEEMDKFLDTY |
| | | | | 1 | | TLPRLNQEEVESLNRRITESDIE |
| | | 1 | | l | | AIINSLPTKKSPGPDGFTAEFYQ |
| İ | | | | | | RYKEELVPFLLKLFQSIEKEGIL |
| 1 | | | | | | PNSFYEASIILIPKLGRDTTKKE |
| l | | | | | | NFRPISLMNIDAKILNKILANRI |
| l | | | | | | QQHIKKLIHHDQVGFIPGMQG |
| | | | | l | | WFNICKSINVIHHMKRTKDKNH |
| | | | | | | MIISIDAEKAFDKIQQPFMLKTL |
| | | | | | | NKLGIDGTYLKIIRAIYDKPTAN |
| | | | | | | IILNGQKLEAFPLKTGTRQGCPL |
| | | | | | | SPLLFNIVLEVLARAIRQEKEIK |
| | | | | | | GFQLGKEEVKLSLFVDEMILSL |
| 1 | | | | | | ENPMVSAKNLLKLISNFSKVSG |
| | | | | | | YKINVQKSQAFLYTSNRQTESQ |
| | | | | | | IMSELPFTIASKRIKYLGIQLTGE |
| | | | | | | VKDFFKENYKPLLNEIKEDTDK |
| | | | | i | | WKNIPCSRVGRINIMKMAILPK |
| | | | | | | VIYRFNAIPIKLPMTFFTELEKTT |
| | | | | | | LKFIWNQKRARIAKSILSQKNK |
| | | | | | | AGGITLPDFKLYYKATVTKTAC |
| | | | | | | HRVGRAQQHSISKWKWYIHDW |
| | | | | | | SQVGPEGTNDSARYPDTTQKW |
| | | | | | | TAAALQPLSRTSLKDSHEGKSS |
| | | | | | | QWAELRAVHLVLRFAWKEKW |
| | | | | | | PDVQLYTDSWAVASGLAGWS |
| 1 | | | | | | GTWKKHDWKIGDKEIWGRATP |
| | | | | | | VIAQWAHEQRGHGGRDGDYA |
| 6277 | 36645 | Α | 6327 | 3193 | 6107 | SMKTGLEKKMKRNEQSLQEIW |
| | | | | l | | DYVKRPNLPLIGVPESDGDNAT |
| | | l | | | | KLENTLQDIIQENCPNLARQANI |
| | | | | | | QIQEIQRTPQRYSSRRATPRHIIV |
| | | | | | | RFTKVEMKEKMLRAAREKGRV |
| | | | | | | THKGKPIRLTAALSAETLQARR |
| | | l | | l | | DRRPIFNILKEKNFQPRISYPAK |
| | | | | l | | LSFVSEGEIEYFTDKQMLRDFL |
| 1 | | 1 | 1 | l | | MTRPALKELLKEALNMETTGA |
| | | | | l | | PRFIKQVLRELQRDLDTHTIITG |
| | | 1 | | 1 | | DFNTPLSTSDRSTRQKVNKDIQ |
| | | _ | | | | ELNSALHQADL |
| 6278 | 36646 | Α | 6328 | I | 1808 | |
| 6279 | 36647 | Α | 6329 | I | 4695 | |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------------|----------------|------------|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | İ | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 6280 | 36648 | A | 6330 | <u> </u> | 2915 | MIMGDENTPLSTLDRSTROKVN |
| 0200 | 30048 | <u> </u> ^ | 0330 | ľ | 2,713 | KDTWELNSALHQADLIDIYRTP |
| | | | | | | HPKSTEYTFFLAPHHTYSKIDHI |
| | | | | | | AGNKALLSKCERTEIITNCLSDF |
| | | ļ | | | | SAIKLQLRIKKLTQNHSTTWKL |
| | | | | | | NNLLLNDYWVHNEMKAEIKIF |
| | | | | | | FETNKNKDTTYQNLWDTFKAV |
| | | | | | | CRGKFIALNAHKRKQERSKTDT |
| | | | | | | |
| | | l | | | | RTSQLKHLENQEQTHSKASRRS |
| | | | | | | WFFEKINKIHRPLARLIKKKREK |
| | | l | | | | NQIDAIKNDKGDITTNPTEIQTT |
| 6001 | 26640 | l . | (22) | 1 | 6730 | REYYKHLYTN |
| 6281 6282 | 36649 36650 | B A | 6331 | 1 | 378 | |
| 6283 | 36651 | Ä | 6333 | 3 | 1700 | |
| 6284 | 36652 | A | 6334 | 1 | 1759 | |
| 6285 | 36653 | Α | 6335 | 2 | 409 | |
| 6286 | 36654 | A | 6336 | 1 | 2051 | MFGRSRSWVGGGHGKTSRNIH |
| | | 1 | | | | SLDHLKYLYHVLTKNTTVTEQ |
| | | 1 | i i | | | NRNLLVETIRSITEILIWGDOND |
| | | ı | | | | SSVFDFFLEKNMFVFFLNILROK |
| | | 1 | | | | SGRYVCVQLLQTLNILFENISHE |
| | | 1 | | | | TSLYYLLSNNYVNSIIVHKFDFS |
| | | | | | | DEEIMAYYISFLKTLSLKLNNH |
| | | | | | | TVHFFYNEHTNDFALYTEAIKF |
| | | | | l | | FNHPESMVRIAVRTITLNVYKV |
| | | | | | | DNQAMLHYIRDKTAVPYFSNL |
| | | | | | | VWFIGSHVIELDDCVQTDEEHR |
| | | | ŀ | 1 | | NRGKLSDLVAEHLDHLHYLND |
| | | | | | | ILIINCEFLNDVLTDHLLNRLFLF |
| | | | | | | LYVYSLENODKVFLIIHHAPLV |
| | | | | | | NSLAEVILNGDLSEMYAKTEOD |
| | | | | | | IORSSVLPTLSSLWOGSHLSLNC |
| İ | | | ŀ | | | LOSGLHKCSSHLCGAOAAADS |
| | | ı | | | | VTGEIPAIRSLEWLISAGSKART |
| | | | | | | FFFLKMLIGFWEKVDCEYORR |
| | | 1 | | | | OVLSTRLOEALPSNRLTDVAAV |
| | | | | | | HSSCMLGFGSTAPRGSWIGDPA |
| | | | | | | AVHLPLPGELAEHLGSKGTTTV |
| | | | l | 1 | | TKHOPOAKPSIRCFIKPTETLER |
| | | | l | | | SLEMNKHKGKRRVOKRPNYK |
| | | | 1 | | | NVGEEEDEEKGPTEDAQEDAE |
| | | | | 1 | | KAKGTEGGSKGIKTSGESEEIE |
| | | | İ | | | MVIMERSKLSELAASTSVQEQN |
| | | | l | 1 | | TTDEEKSAAATCSESTQWSRPF |
| | | | | | | LDMVYHALDSPDDDYHALFVL |
| | | | ŀ | 1 | | CLLYAMSHNK/GKSPEKEEGLS |
| | | | İ | | | GTQSHPGKAGTFGKEGAEERK |
| 6287 | 36655 | Α | 6337 | 2 | 2753 | |
| 6288 | 36656 | Α | 6338 | I | 577 | |
| 6289 | 36657 | IA | 6339 | 1 | 849 | |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nuclcotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|---------|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide inscrtion) |
| | | | | sequence | | |
| 6290 | 36658 | А | 6340 | 1 | 1293 | |
| 6291 | 36659 | A | 6341 | 1 | 861 | |
| 6292 | 36660 | A | 6342 | 154 | 6208 | RRAPGKIPGQASAFLGRTWSRP |
| | | | | | | CLRTQLCVIVSCLAKAGVQGYI |
| | | | | | | VGSPGGAKRFLFSERTGSFSKL |
| | 1 | | | | | AAMSSWLGGLGSGLGQSLGQV |
| | | | | 1 | | GGSLASLTGQISNFTKDMLMEG |
| | | | | | | TEEVEAELPDSRTKEIEAIHAIL |
| | | 1 | | | | RSENERLKKLCTDLEEKHEASE |
| | 1 | ļ | | l | | IQIKQQSTSYRNQLQQKEVEISH |
| | | l | | | | LKARQIALQDQFLKLQSAAQS\ |
| | | | | | | PSGAGVPATTASSSFAYGISHHI |
| | | | | | | SAFHDDDMDFGDIISSQQEINRI |
| | | 1 | | | | SNEVSRLESE |
| 6293 | 36661 | Α | 6343 | 3810 | 5310 | SQGTCVPDRPCNVSG*RI\SIEEI |
| | | l | | | | EAGRIPNPHLGPVEERLALHVL |
| | | ı | | | | QQQGLVPEHVESRPLYSPLQPD |
| | | 1 | | | | IEQAFPSFGRKSRWIRVIPFPRFF |
| | i i | | | | | LRCIIWNTRDVILDDLSLTGEK |
| | | 1 | | | | MSDIYVKGWMIGFEEHKQKTD |
| 1 | | | | 1 | | VHYRSLGGEGNFNWRFIFPFDY |
| | | | | | | LPAEQVCTIAKKDAFWRLDKT |
| | | | | 1 | | ESKIPARVVFQIWDNDKFSFDD |
| 1 | 1 | | | - | | FLDPYAIVSFLHQSQKTVVVKN |
| | | | | | l | TLNPTWDQTLIFYEIEIFGEPAT |
| | 1 | | | | | VAEQPPSIVVELYDHDTYGADE |
| | 1 | 1 | | | | FMGRCICQPSLERMPRLAWFPL |
| | 1 | 1 | | | | TRGSQPSGELLASFELIQREKPA |
| | | 1 | | | | IHHIPGFESEDTDLPYPPPQREA |
| | | 1 | | | | NIYMVPQNIKPALQRTAIEILA |
| | | l | | | | WGLRNMKSYQLANISSPSLVVI |
| | | l | | | | CGGQTVQSCVIRNLRKNPNFDI |
| | | l | | | | CTLFMEVMLPREELYCPPITVK |
| | | 1 | | | | VIDNRQFGRRPVVGQCTIRSLES |
| į | | 1 | | | | FLCDPYSAESPSPQGGPDDVSL |
| | | | | | | LSPGEDVLIDIDDKEPLIPIQNYA |
| 6294 | 36662 | Α | 6344 | 1 | 527 | |
| 6295 | 36663 | Α | 6345 | 5251 | 5711 | PPQRGPPSSSCYSRSQRSVSRCP |
| | | | | | | SRHRPSAASPRPGRPSGRSGLLA |
| | | 1 | | | | GLRLWAGAGCFQCPPCLQRGL |
| | | 1 | | 1 | 1 | FSPEALRPQAPAHKGLFSGSLW |
| | | | | 1 | 1 | PQQRSHQGLRAAATS*DRRAG |
| | | ı | | | | ALCKWCPRPSGTPRGEHLS*EN |
| | | \perp | | | | ESLPP**RWAHQTAPQESQTS |
| 6296 | 36664 | Α | 6346 | I | 924 | |
| 6297 | 36665 | Α | 6347 | 1 | 894 | |
| 6298 | 36666 | A | 6348 | 1 | 525 | |
| 6299 | 36667 | A | 6349 | 6 | 343 | |
| 6300 | 36668 | A | 6350 | 1 | 2693 | |
| 6301 | 36669 | A | 6351 | 26 | 353 | |
| 6302 | 36670 | A_ | 6352 | 1 | 9182 | |

| SEQ ID NO: | SEQ ID NO: of peptide sequence | | SEQ ID NO: in USSN 09/540,217 | Nucleotide location of first codon for peptide sequence | eodon for last amino acid of peptide sequence | Amino acid sequence (X=Unknown, ^=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
|---------------|--------------------------------------|---|-------------------------------------|--|--|--|
| 6303 | 36671 | A | 6353 | | 8655 | EAAKDLADIAAFFRSGFRKNDE MKAMDVLPILKEKVAYLSGGR DKRGGPILTPARSNHDRIRQE DLRRLISYLACIPSEEVCKRGFT VIVDMRGSKWDSIKPLLKILQE SPFCCHVALIIKPDNFWQKQRT NFGSSKFEFETMWYSLEGLTKV VDPSQLTPEFDGCLEYNHEWI EIRVAFEDYISNATHMLSRLEEL QDILAKKELPQDLEGARNMIEE HSQLKKKVIKAPIEDLDLEGQK LLQRIQSSESF |
| 6304 | 36672 | A | 6354 | 1 | 1338 | |
| 6305 | 36673 | С | 6355 | 152 | 404 | |
| 6306 | 36674 | A | 6356 | 137 | 1278 | MDSOPNSTROGSGRR/MEIKGI QLGKEEVKLSLFADDMIVYLEN AITSQPKISLS**ATSAKSQDTKS MCKNHKHSYTPITOKQRAKS* VNSHSQLLQRE*NT*ESNL*GT* RTSSRKITTNICSMK* KRIQTING RTHAHAFGESIS* KWPYCPR*F IDSMPSPSSYQ*LSSQNWKKRL SSSYGTIKKEPASPSQS* AKRTKL AEASILLPDFKLYYKATVTKTAW DMDEAGNHHSQQTITRITKNQT PHVLTHRWELNNENTWTQGE HHTPGLVVRRSPDPEQNFKAVR CLDLPDFSSSFLAVLTHFKPA FLQSLR**DKPRSISPALGTWHKP *KITPKKQ/HQAITKPNTEYRTA VKPSVVGALPDINSFLKLGGLH RITMGCLLD |

| SEQ ID | | | SEQ ID NO: | | | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------------------|---------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | **Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | | | |
| 6307 | 36675 | Α | 6357 | l . | 2569 | MRTKTQHTRISWDAFKAVCRG |
| | | | | | | KFIALNAHKRKQERSKIDTLTS |
| | | | | | | QLKELEKQEQTHSKASRRQEIT |
| | | | | | | KIRAELKEIETQKSLQKINESRS |
| 1 | | | | | | WFFERINNIDRPLARLIKKKREK |
| | | 1 | | | | NQIDTIKNDKGDITTDPTEIQTT |
| | | l | | | | REYYKHLYANKLKNLEEMDKI |
| l | | I | | | | LDTYTLPRLNQEEVESLNRPITC |
| l | | | | | | SEIVTIINSLPTKKSPGPDGFTAE |
| | | | | | | FYQRYKEELVPFLLKLFQSIEKE |
| ļ | | | | | | GILPNSFYEASIILIPKPGRDTTK |
| | | | | | | KENFRPISLMNIDAKILNKILAN |
| | | l | | | | RIQQHIKKLIHHDQVGFIPGMQ |
| | | 1 | | | 1 | GWFNIRKSINVIQHVNRAKDKN |
| | | l | | | 1 | HMIISIDAEKDFDKIQQPFMLKT |
| | | 1 | | | | LNKLGIDGTYLKIIRAIYDKPTA |
| | | 1 | | | | NIILNGQKLEAFPLKTGTRQGCF |
| | 1 | 1 | | | | LSPLLFNIVVEVLASAIRQEKEI |
| | | | | | i | KAQNLLKLISNFSKVSGYKINV |
| | | | | | | QKSQAFLYTNNRQTESQIMSEL |
| | l | l | | | 1 | PFIIASKRIKYLGIQLTRDVKDLF |
| | | | | | | KENYKPLIKEIKEDTNKRKNIPC |
| | | | | | | SRVGRINIVKMAILPKVIYRFNA |
| | | l | | | | IPIKLPMTFFTELEKTTLKFIWN |
| 1 | | | | | 1 | QKRAHIAKSILSQKNKAGGITLE |
| | | l | | | | DFKLYYKATVTKTAWYSYQNR |
| | | | | | 1 | DIDQWNRTEPSEITPHIYNYLIF |
| | 1 | | | | | DKPEKNKQWGKDSLFNKWGW |
| | | 1 | | | | ENWLAIWRKLKLDPFLTPYTKI |
| | | 1 | | | | NSRWIKDLNVRPKTIKTLEENL |
| | | 1 | | | | GITIQDIGMGKDFMSKTP/TSNG |
| | | 1 | | | | NKRQN*QMGSNETKELLHSKR |
| 6308 | 36676 | A | 6358 | 1702 | 2252 | FLSLFFFISLASSLSILLIHIMNSW |
| | | | | ļ | | IPHSPIFTDLNVESSRLCPLGDIM |
| | l | 1 | | | | M*IPLTWYLIVTCTHLSREITTV |
| | | 1 | | | | PRGLARLWSFTRICPRTHCKPIP |
| | | l | | | | A\VLLRAGCPPSCWWDQDTHS |
| | | l | | | | QLPSKRSSYTLFFCTVTEYPFLD |
| 1 | | 1 | | | | *WP*NHGTPC*TAPLWSMF/PCS |
| | | | | | | CWYPVTGPGVSCSPSCVQVFSL |
| 1 | | l | | | | FISHL*VRTCGVWFFVLAIVC*E |
| l | | l | | | | *WFPASSMSQAVLVTVAL*YSL |
| | | | | | | KSGSVMPPA\FSFGLGLTWRCR |
| 1 | 1 | | | | | LFFGSIRTLK*IFPIL*RKSLVA* |
| | 1 | | | | I | WGWH*IYKLRWAVWPFSRY*F |
| 1 | 1 | | | | l | FLPMSM/VMFFHLFVSSFISLSS |
| | | | | | | GL*FSLKRSFMSLVSWIPKYFIL |
| | 1 | | | | 1 | FEAIVNGSSLMIWLSVCLLLLH |
| | | | | | | KNACDFCTLILYPETFLKLLISL |
| 1 | | | | | | RRFWAETMGFSRYTIMSSANR |
| 1 | | 1 | 1 | | | DNLTSSFPN |

| SEQ ID | SEQ ID NO: | Met | SEO ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown. |
|--------|------------|-----|------------|-------------------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 6309 | 36677 | A | 6359 | 207 | 1209 | IPRHIHPPKTKPGRS*/TP*IDO*O |
| | | | | | | ALKLRQ/CINSLPTKKSPGPDGF |
| | | 1 | | | | TAKFYOSPSLTGKNDKEPEILPY |
| l | | ı | | | | FHADFLVVPGTHQASPVLMVL |
| | | İ | | | | GHKSFPHRNSPPSVCMANFFTQ |
| | l . | | | | | KPPSQSIHNAVNTHTDPPLFLVL |
| | | 1 | | | | LKDRGLLVIWCHESQGDELWH |
| | I . | | | | | LVLLDSKCCFGSMTHRMEWSG |
| | | 1 | | | | PSAAGLLEFAGGPLQTLFAWVS |
| | 1 | 1 | | 1 | | AVEAAEQRILLNSKCCCLIIPLE |
| | 1 | l | | | | ALSQRGIWPWQGSPVPRPWTT1 |
| | | 1 | | 1 | | TLWPVRNQATQQETSLMPCQL |
| | 1 | | | | | EGKEPLALPTKEAEIEGRRTGEI |
| | | 1 | | | | KKVERDSNTNKEELLLDLAFK |
| 1 | 1 | 1 | | | | VSSLFDKLEEVVELLVIGELQL |
| | | | | | | YPSK |
| 6310 | 36678 | Α | 6360 | 544 | 678 | AFFHVSFGCINVFF*EVSVHML |
| | | | | | | CPLFDGVVFFLVNLFEFFVDSG |
| 6311 | 36679 | Α | 6361 | 7 | 94 | VRTSGVWFFVLAIVC*E*WFPA |
| | | | | | | SSMSLIY |
| 6312 | 36680 | A | 6362 | 381 | 431 | ATKODSVSKKKEEEEEEEEE |
| | | | | | | EEEEEEEEEEEEKEK/GNK |
| | | | | | | ERKK/DKGKARQVQARQIYLLS |
| | | _ | | | | LHLGRIRKVPNNNKA*SSCP |
| 6313 | 36681 | В | 6363 | 1 | 603 | |
| 6314 | 36682 | Α | 6364 | 1 | 987 | |
| 6315 | 36683 | В | 6365 | 1 | 444 | |
| 6316 | 36684 | A | 6366 | 977 | 1177 | RTSISSPVSSTCSPLVMPTLLPQP |
| | | l | | | | TVPWRMWRPCTQ*RNAGTFSP |
| | | ļ. | | | | AVAMGLPVEAVICLSV*DSPA |
| 6317 | 36685 | A | 6367 | 1148 | 1395 | Will a constitution of the |
| 6318 | 36686 | A | 6368 | 33 | 663 | VHVLCGDTDETGNHHSQQTIA |
| | | ı | | | | RTKNQTPHVLTHRERLSLRRGL |
| 1 | | | | | | HSCAYSLHRWLGARHAQKGSR |
| | | 1 | | | 1 | NTKGCGGQGPRTSERGPASGEF |
| | | 1 | | | | SENCTSLLGQRGVFSPGRRALL |
| | | 1 | | | | HSPSDG\SVPLGAVDSSP\PASTR |
| | | l | | | | RDWSHWAVGKPSPEREPAGKV |
| | | | | | | T*TTRQLQPASP*REHPLLNSQH |
| | | | | | | GHCLKISLPLLPTVLSPSPPLSLC SNVTFSTRPLT |
| 6319 | 36687 | A | 6369 | 1 | 1314 | |
| 6320 | 36688 | A | 6370 | 120 | 410 | |
| 6321 | 36689 | A | 6371 | 1 | 492 | |
| | | | <u> </u> | | | |

| SEQ ID NO: | SEQ ID NO: of peptide sequence | Met hod | SEQ ID NO: in IJSSN 09/540,217 | Nucleotide location of first cudun for peptide sequence | Nucleotide location of last codon for last amino acid of peptide sequence | Amino acid sequence (X=Unknown, *=\$top codun, /=possible nucleotide deletion, \=possible nucleotide insertion) |
|---------------|--------------------------------------|------------|--------------------------------------|--|---|--|
| 6322 | 36690 | A | 6372 | 3 | 945 | EEVPRSMSKKKKRKRSRSKER EEEEEEEEEEEEEEEEEEEEEEEEE |
| 6323 | 3669I | В | 6373 | I | 792 | |
| 6324 | 36692 | С | 6374 | 348 | 884 | |
| 6325 | 36693 | A | 6375 | I | 588 | |
| 6326 | 36694 | В | 6376 | I | 5339 | |
| 6327 | 36695 | В | 6377 | 520 | 3146 | |
| 6328 | 36696 | Α | 6378 | 1 | 2044 | |
| 6329 | 36697 | A | 6379 | I | 585 | |
| 6330 | 36698 | A | 6380 | l | 2433 | |
| 6331 | 36699 | В | 6381 | 53 | 441 | |
| 6332 | 36700 | A | 6382 | 2 | 425 | |
| 6333 | 36701 | A | 6383 | 1386 | 2569 | FLRKHRESGNDEMTALCSFRO VAGEBELGVIOPEKSVSVAAGE SATLRCAMTSLIPVGPIMWFRG AGAGRELIYNQKEGHFPRVTTV SELTKRNNLDFSIISNITPADAG TTYYCVKFRKGSPDDVEFKSGA TPEHTVSFTCESHGFSPRDITLK WFKNGNELSDFQTINVDPAGDS VSYSIHSTARVULTRGDVHSQV ICEIAHTUQDPLRGTANLSEAI RVPPTLEVTSQPIRAENQANVT WQVSNFYPRGLQLTWLENGNV SKTETASTLIENKDGTYNWMS SKTETASTLIENKDGTYNWMS WILVNTCAHRIDDVVLTCQVEH GQQAVSKSYALEISAHQKEH GSDITHEPALAPTLAPLLVALLLG PKLLLLVVQVSAIYICWKQKA |

| SEO ID | SEO ID NO: | Met | SEO ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X-Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | |
| | sequence | 1 | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 6334 | 36702 | A | 6384 | 1 | 2453 | MEPAGPAPGRLGPVLCLLLAAS |
| 0334 | 30702 | l^ | 0304 | l' | 2433 | CAWSASRQLPAVQVLRGDVTC |
| | | | | l | | GSDHVFLLAYIKHLAVAGRRA |
| | | | | 1 | | |
| | | | | | | LKATVHVHQRTLLRPGGCGSV |
| | | | | | 1 | PGKRAVTLISKCSDGQPAFPGA |
| | | | | | | PAGNTNTFLVCSCGFPDLQSSR |
| | | | | | | GPERALCAFIQCLMVRPEEQRE |
| | | | | | | KNWPGPRGRSMARPGWNAKPE |
| | | | | | | VVQAKAFKNWAVLELSTVSAR |
| | | | | | | NLTGSRIPRENTKVILIGTIWVL |
| | | 1 | 1 | | | CFLGSALGVCDPGGTHSHLAM |
| | | | | | į. | HVVIFGPVGSNNPSIVIIIIIRPIL |
| ı | | | | | | QIKSQRSRVGETFPGVSWVAEL |
| | | 1 | | | | ESKSKHTFSQCQALLQPWGRK |
| | | 1 | | | | LSSCSQRTYNLLLVCIQSMNVI |
| | | | | | | DKHLRKHRGSRVAGEEELQVI |
| | | | | | | QPDKSVLVAAGETATLRCTATS |
| ı | | | | | | LIPVGPIQWFRGAGPGRELIYNQ |
| ı | | | | | | KEGHFPRVTTVSDLTKRNNMD |
| | | 1 | | | | FSIRIGNITPADAGTYYCVKFRK |
| | | | | | | GSPDDVEFKSGAGTELSVRAKP |
| | | | | | | SAPVVSGPAARATPQHTVSFTC |
| | | | | | | ESHGFSPRDITLKWFKNGNELS |
| | | | | | | DFQTNVDPVG\ESVSYSIH\STA |
| | | | | | | KVVL\TREDVNSQSFW*GPTVT |
| | | | | | | LOGDPLRGTANLSETIRVPPTLE |
| | | | | | | VIQQPVRAENQVNVTCQVRKF |
| | | | | | | YPORLOLTWLENGNVSRTETA |
| | | i | | | | STVTENKDGTYNWMSWLLVN |
| | | | | | | VSAHRDDVKLTCQVEHDGQPA |
| | | 1 | | | | VSKSHDLKVSAHPKEQGSNTA |
| | | 1 | | | | AENTGSNERNIYIVVGVVCTLL |
| 6335 | 36703 | A | 6385 | I | 405 | |
| 6336 | 36704 | Α | 6386 | 91 | 2926 | PACPSPRLPFTNTDTHIDTSSPA |
| 1 | | | | | | SRSTRCLCISTHGVLAQSGGSSG |
| | | | | | | GPAVPTVQRGIIKMVLSGCAIIV |
| | | | | | | RGOPRGGPPPEROINLSNIRAGN |
| | | | | | | LARRAAATOPDAKDTPDEPWA |
| | | | | | | FPAREFLRKKLIGKEVCFTIENK |
| | | | | | | TPOGREYGMIYLGKDTNGENIA |
| | | | | | | ESLVAEGLATRREGMRANNPE |
| | | 1 | | | İ | QNRLSECEEQAKAAKKGMWSE |
| | | | | | | GNGSHTIRDLKYTIENPRHFVD |
| | | 1 | | | | SHHQKPVNAIIEHVRDGSVVRA |
| | | | | | | LLLPDYYLVTV |
| 6337 | 36705 | Α | 6387 | 2 | 448 | |
| 6338 | 36706 | Α | 6388 | 1 | 645 | |
| 6339 | 36707 | Α | 6389 | i - | 294 | |
| | 1 | | | | · | · |

| SEQ ID NO: | SEQ ID NO; of peptide sequence | Met | SEQ ID NO: in USSN 09/540,217 | Nucleotide location of first eodon for peptide sequence | Nucleotide location of last codon for last amino acid of peptide sequence | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
|---------------|--------------------------------------|-----|-------------------------------------|--|---|---|
| 6340 | 36708 | A | 6390 | 23 | 321 | RGREHTQGIPGAGKRWH*FKV LLTQ/CW*SEFSVIRQFKAGPGG LDQFRDRSK/RWLRDLRGRLLG SLNASLVLRALFSGNWGLTAN QL*LAVGAKGDPEA |
| 6341 | 36709 | Α | 6391 | 1 | 1599 | |
| 6342 | 36710 | Α | 6392 | 1 | 561 | |
| 6343 | 36711 | A | 6393 | | 1833 | STLASSEQGGFWRGPRAILLL LELECHARSHDGKYSREKN QPKPSPKRESGEEFRMEKLNQL WEKAQRQERYPCRRRRRVKQO WEKAQRQERYPCRRRRRVKQO AGTTRYPELKTFEMGVPELCRP SGPHYLISNAGVRLDLLNSPVL SIPESLRGKVNDLQNKKELLER KGRGETGLARPMHDLTAAQGG YGCALVHGAQVEGAGAQGWA GTVHATCRGCTGTACQEALVT ATACSSCQRGGTRAPQGQHTL ESMGLNCLPQGAASGSDHHCG PRISDLPGSAARTSRWPASSELH LPPVRLAELHADLKIQERDELA WKKLKLDGLDEGGEKEARLIR NLNGHWRAEDAHQDGGVNK WDIPTVVOVGVAAILAVAKKL FLIPNIRGVLSESPATLHSLQV ASVLWSLEFLPYGSRSPVVIQET ULAKYGLDGKKDARQVTSNS LSGTQEDGLDDPRLEKLWHKA KTSGKPSGEELDKLWRELHHK KTSGKPSGEELDKLWRELHHK KKSKHENYLLETLSTEVHPG PQDGVASTGREHSPMETLEQEE LKHFEAKIEKHNHYQKIQLEIA HEKLRHAESVGDRRS*ASPR ESTPCLEGRTKGAGHRPR*KKHLIG |
| 6344 | 36712 | Α | 6394 | 1 | 185 | DFFDNSAQVTIAGIPCDIRHVSP RKIECTTRAPGK\V*GSPPLSQAI EGFFLKLEMLLRDWN |
| 6345 | 36713 | A | 6395 | 1 | 1512 | |
| 6346 | 36714 | A | 6396 | 117 | 268 | QSLLLEYLHLYLHLCYLHLANK QELTLTWYKE*CTFFLPSV*NPF HQNLA |
| 6347 | 36715 | Α | 6397 | 1 | 500 | |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 1 | | | | sequence | | |
| 6348 | 36716 | A | 6398 | 1301 | 2565 | TLLTILPFYLFKNRTSI.TGYLRI |
| 05.10 | 30110 | 1 | 0370 | 1.50. | 2505 | WILSTKLFCLSTLWLAPTLFLIP/ |
| | | | | | | LPDPHDCISLIHLAFTPFPHTSFF |
| | | l | | | | PIPHPDHTWFIDGSSTWPNRHSP |
| | | | | | | AKVGYAIVVSSTSILEATALPPS |
| | | | | | | TTSQQAELIALTRALALAKGLH |
| | | l | | | | VNIYTDSKYAFHILHHNAVIWA |
| | | | 1 | | | ERGFLSTQRSSIIIASLIKTLLKA |
| | | | | | | ALLPKEAGVIHCKGHQKASDPI |
| | | l | | | | AQGNAYADKTKFLDLAFPPLR |
| | | | | | | LSFTCQITQAVSQALGIQWNLH |
| | | | | | | TPYRPOSSGKDWTVFLPLALHR |
| | | | | | | IRARPREATGYSPFELLYGRTFL |
| | | | | | ł | LSPNLVPDTSPLGDYLPVLWOA |
| | | | | | | ROEIHOAANLLLSTPDSOLYED |
| | | | | | | TLAGRSVLIKNLTPOTLOPRWT |
| | | | | | | GPYLVIYSTPTAVRLODPPHWV |
| | ļ | | | | | HRSRIKLCPSDNOPNLSSSSWKS |
| | | | | | | QVLPTTSLKVTLISEEQ |
| 6349 | 36717 | Α | 6399 | 581 | 2517 | LFLGYSHTSLLPFPPVQSLLHLL |
| | | | | | | PLYLHTLTHKYGIPLLPPWRPIM |
| | | l | | | | HPLPSH*NLITLTLLNANIPSCST |
| | | | | | | L*KD*SLLSLTCYSMAF*/QPINS |
| | | | | | | PYNSPILSVQKPDKPYSSFRYVY |
| 1 | | l | | | | SLFVESPTITIVPGPDFNLASHIIP |
| | | | | | | DTTPDPYDCISLIHLTFTPFPHVS |
| | | | | | | FFPVPHPFHTWFIDGSSTRPNCH |
| | | l | | | | TPAKAGYAIVSSTSIIEVTTLPHS |
| | | 1 | | | | TTSQQAELIALTRTLTLAKGLC |
| | | | | | | VNIYTDPISCTTMLFYGLKCFLT |
| | | | | l | | MQGSSIINASLIKTLLKAALLPK |
| | | | | | | EAGVIHCKGPQKASDPIAQDNT |
| | | | | | | YADKVAKKAASVPTSIPHSSFS |
| | | | | | | PSHLVTPTYSPTETSTYQSLPTQ |
| | | | | | | GKWFLDQGKYLLPASQAHSILS |
| | | | | | | SFCNLFHVGYKPLARLSELLISF |
| | | l | | | | PSWKSILKEITSQCSICYSATPQ |
| | | | | | | GLFRPPPFPKHQAWGFVPTQD |
| | | | | l | | WQIDFTHMPQVGKLKYLLVW |
| | | | | | | VDTFTGWVEAFPTGSEKATVVI |
| | | | | | | SSLLSDVIPRFCLPTSIQSNNGLA |
| | | | | 1 | | MISQITQAVSQALGIQWKLCTP |
| | | | | | | YHPQSSGKVKWANGLLKTHLT |
| | | | | | | KLSLQLKKDWTVLLPLALLRIR |
| | | | | | | ACLRNATGYSPFELLYRCSFLL |
| | | | | | | GPSLIPDTRPTWTAPPKTWHPY |
| | 1 | | | | | YLLSSHTPIHRSQLLIHALLLFTL |
| | | | | | | PVYTVSPSHHS |

| SEQ ID SEQ ID NO: Net SEQ ID NO: Notecotide | nucleotide oilde insertion) EGNICKIQE DPESLLLPPL 1SVAKAELL LGEEEVDH LKLSVLREA LGEEVEANL LILFVGDLDK RVENALNSI KKQQLTGQL |
|--|---|
| 6350 36718 A 6400 281 1095 DCSKRNRHSQVIAI VRRKEDTQGGEKL LAPGPTEYSTYN NKLKDQPEMAEIG ELAQKKIQLIESISS QRGLLEDINANSAI KAVCKSNEFEKYH VVNLLLSLSGRI.AH DSEANQEKLVLIEK ADAKELKEHVDRR SRYLPQDQLQDVQ | EGNICKIQE DPESLLLPPL ISVAKAELL LGEEEVDH IKLSVLREA LGEEVEANL ILFVGDLDK RVENALNSI KKQQLTGQL |
| 6350 36718 A 6400 281 1095 DCSKRNRHSQVIAI VRRKEDTQGGEKD LAPOPTEYSTYYN NKKLDQPEMAEIG ELAQKKIQLEISIS QRGLLEDINANSAI KAVCKSNEFEKYH VVNLLLSLSGRLAF DSEANQEKLVLIEK ADAKELKEHVDRN SRYLPQDQLQDVQ | DPESLLPPL ISVAKAELL ISVAKAELL LGEEEVDH IKLSVLREA LGEEVEANL ILFVGDLDK RVENALNSI KKQQLTGQL |
| VRRKEDTQGGEKE LAPGPTEYSTYYN NKLKDQPEMAEIG ELAQKKIQLIESISR QRGLLEDINANSAI KAVCKSNEFEKYM VVNLLLSLSGRLAF DSEANQEKLVLIER ADAKELKEHVDRR SRYLPQDQLQDYQ | DPESLLPPL ISVAKAELL ISVAKAELL LGEEEVDH IKLSVLREA LGEEVEANL ILFVGDLDK RVENALNSI KKQQLTGQL |
| VRRKEDTQGGEKE LAPGPTEYSTYYN NKLKDQPEMAEIG ELAQKKIQLIESISR QRGLLEDINANSAI KAVCKSNEFEKYM VVNLLLSLSGRLAF DSEANQEKLVLIER ADAKELKEHVDRR SRYLPQDQLQDYQ | DPESLLIPPL ISVAKAELL LGEEEVDH IKLSVLREA LGEEVEANL ILFVGDLDK RVENALNSI KKQQLTGQL |
| LAPGPTE/VSTYYN NKLKDQPEMAEIG ELAQKKIQLESISR ORGLLEDINANSAI KAVCKSNEFEKYH VVNLLLSLSGRLAR DSEANQEKLVLIEK ADAKELKEHVDRR SRYLPODQLQDYQ | ISVAKAELL LGEEEVDH KKLSVLREA LGEEVEANL ILFVGDLDK RVENALNSI KKQQLTGQL |
| NKLKOPEMAEIG ELAQKKIQLIESISS QRGLLEDINANSAI RAVCKSNEFEKYH VVNLLLSLSGRI-A DSEANQEKLVLIEK ADAKELKEHVDRR SRYLPODQLODYQ | LGEEEVDH KKLSVLREA LGEEVEANL ILFVGDLDK RVENALNSI KKQQLTGQL |
| ELAQKKIQLIESISR QRGLLEDINANSAL KAVCKSNEFEKYH VVNLLLSLSGRLAF DSEANQEKLVLIEK ADAKELKEHVDRR SRYLPODQLODYQ | KLSVLREA LGEEVEANL ILFVGDLDK RVENALNSI KKQQLTGQL |
| QRGLLEDINANSAL KAVCKSNEFEKYH VVNLLLSLSGRLAF DSEANQEKLVLIEK ADAKELKEHVDRR SRYLPODQLODYQ | LGEEVEANL ILFVGDLDK RVENALNSI KKQQLTGQL |
| KAVCKSNEFEKYH VVNLLLSLSGRLAF DSEANQEKLVLIEK ADAKELKEHVDRR SRYLPQDQLQDYQ | ILFVGDLDK RVENALNSI KKQQLTGQL |
| VVNLLLSLSGRLAF DSEANQEKLVLIEK ADAKELKEHVDRR SRYLPODOLODYO | RVENALNSI KKQQLTGQL |
| DSEANGEKLVLIEK ADAKELKEHVDRR SRYLPODQLODYQ | KKQQLTGQL |
| ADAKELKEHVDRR SRYLPQDQLQDYQ | |
| SRYLPQDQLQDYQ | |
| | |
| | |
| ESLLLGPSNF | EEQLACER |
| 6351 36719 A 6401 1 972 | |
| 6352 36720 A 6402 514 736 | |
| 6353 36721 B 6403 446 991 | |
| 6354 36722 A 6404 521 903 NIKPASQISPG*I*VI | HEEDTODI C |
| APPSAA/GRLLSLSL | |
| TARCIPAGRLEPLC | |
| LHLSLKSKGSGGRS | |
| NOSVCIQAEKPPLK | |
| MNVLRCRAYSWVI | |
| 6355 36723 A 6405 11 545 | IDWD |
| 6356 36724 A 6406 3 2920 | |
| 6357 36725 A 6407 1 2388 | |
| 6358 36726 A 6408 275 479 | |
| 6359 36727 A 6409 1 3810 | |
| 6360 36728 A 6410 7 1047 | |
| 6361 36729 A 6411 1 705 | |
| 6362 36730 C 6412 304 638 | |
| 6363 36731 A 6413 99 759 WAYLDFWM*HIPH | LGVLL/SAH |
| LLSDLNSCQF*MGS | SRTEGSATG |
| PGSCSAALPLGPYD | PADPMVLE |
| VSMADRDASPHDP | LAKFLFPVP |
| MTLHSALLEVLVPI | EGGTLPPGD |
| TTTIPLNW/IVKIAT | *TLWVPPTF |
| KFTGCRLNTMWKI | PRLGASTL |
| *SNSLRCTLTSFSHI | DWSGWDAG |
| HOVIRPHGFAGYN* | TCGCFHRL |
| MLSACGFSRQMVQ | |
| GSGG | |
| 6364 36732 A 6414 I 685 | |
| 6365 36733 A 6415 I 1359 | |
| 6366 36734 A 6416 3 7714 | |
| 6367 36735 A 6417 I 723 | |
| 6368 36736 A 6418 I 528 | |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|------------|------------|-------------------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 6369 | 36737 | A | 6419 | 38 | 530 | HSPRRSAASLLSQRDHEPHOKE |
| 0309 | 30737 | <u> </u> ^ | 0717 | 100 | 330 | ETPNTSEHOKEKTPDTPPLRTV |
| | | 1 | | l | | TLTVRVHGFILEVSETKNPPIPD |
| | | 1 | | | | TKLRG/ERLOGFGLAGFRSE/GC |
| | 1 | 1 | 1 | 1 | | RPSP*VLQLIKAVWTQRPLGGR |
| | | 1 | | | l | WDWAPWSRRWCSSGRLRPHR |
| | | 1 | | 1 | | NOWSGWEAOAWGLOVPEPCP |
| | | ı | | | | AGRQLRPGEKSSTAP |
| 6370 | 36738 | A | 6420 | 1 | 649 | AGRGERI GERESTAI |
| 6371 | 36739 | A | 6421 | 1 | 987 | |
| 6372 | 36740 | A | 6422 | 1 | 924 | |
| 6373 | 36741 | A | 6423 | i i | 435 | |
| 6374 | 36742 | A | 6424 | 1 | 147 | |
| 6375 | 36743 | Α | 6425 | 11 | 1107 | |
| 6376 | 36744 | Α | 6426 | 3 | 913 | |
| 6377 | 36745 | Α | 6427 | 1 | 159 | |
| 6378 | 36746 | Α | 6428 | 313 | 1083 | |
| 6379 | 36747 | Α | 6429 | 1 | 1245 | MAQELRDTCTSFSSRFDQVEER |
| | | 1 | | | | VMVIEDQINEMKQEEKFREKR |
| | | | | | | VKRNKQSLQEIWDYVKRPNLR |
| | | 1 | | | | LIGVPEKNLEETDKFLDTYTLPR |
| | | 1 | | 1 | | LNQEEVESLNRPITDSEIEAIINS |
| l | | 1 | l | 1 | i | LPTKKSSGPDGFTAEFYQRYKE |
| | | 1 | | | | ELP/RQRHNKKREF*TNIPDEHR |
| 1 | | 1 | | ł | | CKSPQ*NTGKPNPAAHQKAYPP |
| | | 1 | | i | | *SSGLHPWDARLVQHTQINKRN |
| | | 1 | | 1 | | PAYKQNQGQKPHDYLSRCRKG |
| | | 1 | | 1 | | L*QNSAALHAKNSQ*IRY*WDI |
| | | 1 | | 1 | | SQNNKSYL*QTHSQYHTEWAK |
| | | 1 | | | | AGSIFFENWHKRGMPSLTTPIQ |
| | | ł | | | | HSVGSSGQGNQAGERNKGYSI |
| | | 1 | | 1 | | RKRGSQIVPVYR*HNCISRKPH |
| | | 1 | | | | HLSPKSP*AGKQ/SSAKSQD/DKI |
| | | 1 | | ŀ | | NVQKSQAFLHTNNRQTESQIMS |
| | | 1 | | : | | E/APIHNCYKENKISRNPTYKGC |
| | | 1_ | | | | EGPLQGELQTTAQRSKKGHKQI |
| 6380 | 36748 | Α | 6430 | 39 | 314 | KSECLIYTKGSQRLASNGTKLD |
| | | 1 | | | I | GE*L**VDRIRLQKIGNDKLLPA |
| | | 1 | | | | KGGCSNPSQRS*KPRKKIRQMA |
| | | | | 1 | | N*NKQHRGDLK*PDGAENHGT |
| | | _ | | | | RTT |
| 6381 | 36749 | Α | 6431 | 213 | 843 | VDRSRLQKVSNNKLL*AKGECS |
| | | 1 | | | | NPLQGS*KP*KKIRRMAN*NKH |
| | | 1 | | | | CREDLK*PDGVENNGTRTS*FM |
| | | | | | | HKLQ*PI*SSGRKGISD*R*N**N |
| | | | | | | KIHQG*NEGKSVKGSQRERSSY |
| | | 1 | | | | PQRKAHQTNSGSLSRNPTSQKK |
| | | | | 1 | | VGANIQHS*RKEFSTQNFISSQT |
| | | 1 | | 1 | | KLHK*RRNKIFYRQADAERFCH |
| | | | | | | HQACVTRAPEGSTKHGKKQPV |
| | 1 | \perp | | L | | PAPAKTGQIV |

| SEQ ID NO: | of peptide sequence | Met hod | SEQ ID NO: in USSN 09/540,217 | location of first codon for peptide sequence | codon for last amino acid of peptide sequence | Amino acid sequence (X-Unknown, *-Stop codon, /-possible nucleotide deletion, \-possible nucleotide insertion) |
|---------------|------------------------|------------|-------------------------------------|--|--|---|
| 6382 | 36750 | A | 6432 | 1 | 2112 | MRAFVVLMDVSKLPSERGOFG LRSNQOHMRHETSYDRGSVS LLADAVAAATPQGTYSQPRGPS NLAADLRVAEESSGMENLFLK MSFDSIRPAQDGQCTPEISMVTP SPGWSVHTGDLDGHPLPRMVS AHRRSRWSPPPQDGQCTPEISM VIPSPGCSVHTGDLDGHPLPRM LSHARRSRWSPPPQDAQCTPEIS MVTPSPGWSVHTGDLDGHPLPRM LSHARRSRWSPPPQDAQCTPEISM MYTPSPGWSVHTGDLDGHPLPRM LSHARRSRWSPPPQDAQCT PEISMVTPSPGSVHTG |
| 6383 | 36751 | A | 6433 | 1 | 648 | TEIDIN'T TEI GESTING |
| 6384 | 36752 | A | 6434 | | 1539 | MILVSFVSLGSLCLQPGSQTILE KNETVKPHVSFTLLPALSHVSE KNEAESMNSLIPPPPNLHTPAQ APFPLPTKEQDRSSPATEQSW TENDFDELTEVGFRSSVITNSSK LKEDVRTHCKEAKNLEKRLHE/ SAN*NQCGREDL**PASEIGNET RTS*HMHKLQ*PI*SSGRKGVSD *GSNQ*NK*WGEWNQVCKHSS GYYPGELPGYSKAGQHSNSGNT ENTTKILLEKSNPKTHNCQHQ GYPGELPGYSKAGQHSNSGNT ENTTKILLEKSNPKTHNCQHQ GYNEGKSVKGSQRETREARA NKFKS*QKARYN*DQCRTERD RNTENPSKN**IQEPVF*KDQQN **NASKTNKEKEREESNRNKK **KNRTVKPHVSFTLLPALSHVS ENNAEKNTKEKEREESNRNKK **KNRTVKPHVSFTLLPALSHVS ENNAEKNTKEKEREESNRNKKK **KNRTVKPHVSFTLLPALSHVS ENNAEKNTKEKEREESNRNKK **KNRTVKPHVSFTLLPALSHVS LEDVRTHCKEAKNLEKRLHE WLTRINSVEKTLNDLKLKSMA RELHDTCTSFNSFFDQVEEKVS AIEDOTNEINNGENGTKLENTL QDIIQENFPNLA RQANIQQEIRR RCHOTTSFNSFFDQVEEKVS AIEDOTNEINNGENGTKLENTL QDIIQENFPNLA RQANIQQEIRR TQRYSSKATPRHIVRTTKVE MKEKVLRAAREKGLERQEQTN TQRYSSKATPRHIVRTTKVE MKEKVLRAAREKGLERQEQTN TLQKINGERSRFFKKINKIDKTL ARLIKKKREKNQTDAIKNDKR TUTDPTEIQTTITRYYKHLYAN KLENLEEMDKFLDTYTLPRLIND |
| 6385 | 36753 | В | 6435 | 137 | 586 | |
| 6386 | 36754 | Α | 6436 | 129 | 506 | |
| 6387 | 36755 | Α | 6437 | 1 | 237 | |
| 6388 | 36756 | Α | 6438 | 182 | 1034 | |

| SEQ ID | SEQ ID NO: | Mct | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------------------|-----------------------------|---|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 6389 | 36757 | A | 6439 | 203 | 650 | SAIVCGSPLRLRMOAVSSRINSA |
| | | | | | | HSRGAIYSQASSSAACPSVSIAF |
| | | | | | | LRR*IEANVS/WIRTLLSTLCTPK |
| | | | | | | CGPGFKHRIVLCKSSDLSKTFPA |
| | | | | | | AQCPEESKPPVRIRCSLGRCPPP |
| | ŀ | | | | | RWVTGDWGQ/CDSRDPRPGRR |
| | | | 1 | | | RRDFCRNGRAGAGH |
| 6390 | 36758 | Α | 6440 | 207 | 426 | AECTRCAIPK/HSCYPVLLIVVS |
| | | | | | | P*KKQ\NCSLGELSCWRRESCRS |
| | Ì | | | | | SWSNKALPSLTRCLRGFVCGLS |
| | | | | | | CYKGSS |
| 6391 | 36759 | A | 6441 | 524 | 783 | TAVLAARISNQWILSCWS/AVG |
| | | | | | | CTPKCGPGFKHRIVLCKSSDLS |
| | | | | • | | KTFPAAQCPEESKPPVRIRCSLG |
| | | | | | | RCPPPRWVTGDWGQLSPTREK |
| 6392 | 36760 | A | 6442 | 1 | 1524 | |
| 6393 | 36761 | A | 6443 | 1 | 8738 | |
| 6394 | 36762 | A | 6444 | 1 | 642 | |
| 6395 | 36763 | A | 6445 | 1 | 549 | |
| 6396 | 36764 | A | 6446 | 8 | 434 | |
| 6397 | 36765 | A | 6447 | 1 | 2922 1158 | PL DEDODVOCA IIITGI DEWI DIV |
| 6398 | 36766 | Α | 6448 | 18 | 1138 | FLDFDCPYGSAHITGLRFWLPW YRKRQRYWGSHGNCMPPPSLR |
| | l | | | | | VPERCPSHTEPRNLTGA*ELLLL |
| | | | | | | GLSEDPELQPILAGLSLSMYLVT |
| | | | 1 | | | VLRNLLISLAVSSDSHLHTPMC |
| | | | | | | FFLSNLCWADIGFTSAMVPKMI |
| | ŀ | | l | | | VDMOSHSRVISYAGCLTOMSLF |
| | | | | | | AIFGGMEE\NMLLSVMAYDWF |
| | | | İ | | | VAICHPLHYPVIMNPHLGVFLD |
| | | | | | | LGAFFLSLLDSQLHSWIVLQFTF |
| 1 | | | ĺ | | | FKNVEISNFV*DPSQLLNLACSD |
| | ļ. | l | | | | SVINSIFIYLDSIMFGFLPISGILW |
| | | | | | | SYANNVPSILRISSSDRKSKAFS |
| | | l | | | | TCRSHLAVVCLFYGTGIGVYLT |
| | | | | | | SAVAPPLRNGVVASVTYAVVT |
| | | | | | | PMLNPFIYSQRNRDIQSALRRLR |
| | | | | | | SRTVESHOLLHPFSCVGKKGQA |
| 6399 | 36767 | A | 6449 | 2 | 1535 | |
| 6400 | 36768 | Α | 6450 | 1 | 635 | |
| 6401 | 36769 | Α | 6451 | 222 | 1040 | |
| 6402 | 36770 | Α | 6452 | 2 | 1135 | |
| 6403 | 36771 | Α | 6453 | 1 | 576 | |

| SEQ ID | | | SEQ ID NO: | | | Amino acid sequence (X-Unknown, |
|--------|------------|-----|------------|-------------------------------|---------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | ŀ | sequence | | |
| 6404 | 36772 | A | 6454 | 2 | 694 | QCGGIQRSHGSWSQEASDSVW |
| | | | | | | QLQSMWMLDKLTGVFAPRPST |
| | | | | | | GPHKLR\ECLSRIIF\LRNRLKYA |
| | | | | | | LTGDEVKKI\CMQRFIKI\DGKV |
| 1 | | | ! | | } | RT\DITYPVG\FMDVI\SIDKTGR |
| | | | 1 | | | EFPVLIYDTKG/RAFAVHRITP\E |
| | | | l | | | EAQVPSCAKVRRDLCGAQKGIP |
| | | | | | | HLVTH\DARTIPLPR\$PSSKVND\ |
| | 1 | | | | | TIQI\DLEDWARFT*FSSKFDNW |
| | | | | | | *TCCMGDWEGA*P*GRNWVLI |
| | | | | | | HQQRRRAPWDLF |
| 6405 | 36773 | A | 6455 | 1 | 243 | |
| 6406 | 36774 | A | 6456 | 3 | 766 | |
| 6407 | 36775 | Α | 6457 | 1 | 741 | |
| 6408 | 36776 | В | 6458 | 500 | 8643 | |
| 6409 | 36777 | A | 6459 | 1 | 7863 | MKPRTLTVRVTALKVARLESV |
| | | l | | | | PSDVQMCSEFLPSDSAAQLASP |
| | | | | | | SGSRTGAAGGAAYQSCAVLPH |
| | | | | | | SSALWVVDGTRCRGAGGSAHQ |
| | | | | 1 | | GGSATQEPTERVEGSGMAGCR |
| | | | | | | SRVLPHWKAANVLGMSVESAP |
| | | | | 1 | | AVEEEKGEELEQKEKEKEEDTS |
| | | | | | | GNTTHSLGAEDTASSQLGFGVL |
| | | | | | | ELSQSQDVEENTVPYEVDKEQL |
| | ŀ | | | | | QSVTTNSGYTRLSDVDANTAIK |
| | | | | | | HEEQSNEDIPIAEQSSKDIPVTA |
| | | | | | | QPSKDVHVVKEQNPPPA |
| 6410 | 36778 | A | 6460 | 2 | 669 | ERRRKLTIPCPPPHPAPPTGGQ |
| | | | | | | ACRENAEGIL*AANTSEPGKDA |
| | | | | | | EK*KIKV*LAP/CSHSGSSLQSDP |
| 1 | | | | ! | | HFGCSLGPS/DPALGLSGCILPPC |
| | İ | ļ | | | | SGSYLAPAPNSRIPKPGLKPW/H |
| | | | | | | /ESYLPSAVRPHGTQAPGLWPE |
| | | | | | | RGL*PAGFLLRPEPVRAASER/Q |
| i | | | | 1 | | EAVSPER*VPRPPKAQQLHGQS |
| | | | | | | PDPSSLCTALRQDHTHWLDARS |
| | | | | | | VYPDWRGQPWPPLHQDCGHG |
| | | _ | | | 200 | GWR |
| 6411 | 36779 | В | 6461 | 241 | 369 | |
| 6412 | 36780 | A | 6462 | 1 | 510 | |
| 6413 | 36781 | В | 6463 | 1 | 630 | COD CAND A LL ELINGONICO CAND |
| 6414 | 36782 | Α | 6464 | 229 | 561 | SCRGYSRILLLFHKSSWCSQVIS |
| 1 | | | | 1 | | IFRYNIICSRLPRSWKWRLPVY |
| | | | | | | MNWL*YHWFKQYHSSINFISFR |
| 1 | | | | | | SMWFIIIINFKRSPAFILSGSWSIS |
| L | | L | | L | L | IARWQIFVFFTTFGSRTKV |

| SEQ ID | ISEO ID NO. | Mat | SEQ ID NO: | Nucleatide | Nucleatide location of last | Amino acid sequence (X=Unknown, |
|------------|-------------|--------|------------|-------------------------------|--|---|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 6415 36783 | 36783 | Α | A 6465 | 1271 | 1710 | TEGLGHRSSETPGGAALDALTC ERPRVACFPAARGRGLRPRPRL |
| | | | | | | MIGPFETGGGQRLLTLRPRRRR QRRRP/WQGLERPHVRNWGIEL |
| | | | | | | ETLRDAFRPQPSVWRTARGEA GKRKGRLVECLGSQRKVLEGV |
| 6416 | 36784 | В | 6466 | | 772 | LLYAVTRGSFPNLFTPRD |
| 6417 | 36785 | A | 6467 | 1 | 1272 | |
| 6418 | 36786 | | 6468 | 3 | 236 | |
| 6419 | 36787 | A C | 6469 | 1 | 457 | |
| 6420 | 36788 | _ | 6470 | 148 | 324 | |
| 6421 | 36789 | B A | 6471 | 148 | 1407 | |
| | | | 6472 | 1 | | |
| 6422 | 36790 | Α | | | 651 | |
| 6423 | 36791 | Α | 6473 | 619 | 835 | |
| 6424 | 36792 | Α | 6474 | 319 | 535 | L COUNTY OF THE |
| 6425 36793 | Α | 6475 | 1319 | 647 | LCRRIYMYFCVMKNWMQSLW KLCTNKR*RIDKPTLHOVVVRK | |
| | | | | | | |
| | | l | | | | *LTPLGMKNQVDSLELLETRSL |
| | | 1 | | | | KKDPVELGSKSLRRCCCQTEPV |
| | | | | | 1 | NLLPHVSIGTLKI*SRILRLQRP |
| 6426 | 36794 | A | 6476 | 39 | 515 | |
| 6427 | 36795 | В | 6477 | 1 | 807 | |
| 6428 | 36796 | Α | 6478 | 3 | 247 | GANICCW*GLQE/VFHSW*KTQ |
| | 1 | | | | | EPSWLHLVDPTTGLQVELPASP |
| | 1 | | | | | APFARIPQPLGGRWDWAPWSR |
| | | | | | | GWCSSGRLGQHRSPWSG |
| 6429 | 36797 | Α | 6479 | 27 | 363 | |
| 6430 | 36798 | В | 6480 | 1132 | 1268 | |
| 6431 | 36799 | A | 6481 | 1628 | 2008 | |
| 6432 | 36800 | Α | 6482 | 953 | 1087 | |
| 6433 | 36801 | Α | 6483 | 2 | 443 | QLAGRCGGRGMSGNRGC\WGA |
| | | l | | | l | CGPAGVPGG/CWAWCALHSEE |
| | | | | | | PASPALRSISRRALAAFPRGRAR |
| | | | | | l | DLQPAMPEPPTPSVGSCAAQAS |
| | | ı | | | | PTSAAPCSMAPSPIDHPRAEECV |
| | | 1 | | | | ARRGTGRHDELIVALPFMMIPW |
| | | | | | | HSSIQPFTIHPFNWNFG |
| 6434 | 36802 | С | 6484 | 175 | 423 | |
| 6435 | 36803 | В | 6485 | 122 | 608 | |
| 6436 | 36804 | Α | 6486 | 644 | 1149 | KTMHWKAPLMSWHMHRASSQ |
| | 1 | 1 | | | | KQTRTGTQT/MEAQLQQLQRY |
| | 1 | 1 | | | 1 | QEALLQVLRKGEKKAFNMGNI |
| | | | | 1 | I | SEVLQRADESCSQFYERLYEAF |
| | | | | 1 | | QLCSPFDPEATENQCMVNAVF |
| | | | | 1 | | VGQTQGDIRRKLQKLECFTGM |
| | | | | | 1 | NVTQVLEVATKVYTNCEEETQ |
| | | | | 1 | 1 | GKGQFAGGSTYGKGGECPKTK |
| 6437 | 36805 | Α | 6487 | 1 | 2847 | |
| 6438 | 36806 | В | 6488 | 329 | 742 | |
| 6439 | 36807 | A | 6489 | 1 | 1035 | |
| - 102 | - 0001 | 1: | 1 | 1 | | L |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop cadon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 6440 | 36808 | A | 6490 | 13 | 630 | INPPPPPFRPEPPSSSNSPKMTDF |
| | 1 | | | | | KGERGEATRYMFSRPF\RK\HG |
| | 1 | | | | | VVPLGPHICRI\YRKGDIVD\IKG |
| | | | | | | MGYCSKKGIAPTKCY\HGONLE |
| | 1 | ı | | | | GVLPMLPQHACWPFVVNQPVL |
| | 1 | | | | | GQSFFPRELMCRIEHI*ALLRAR |
| | 1 | | | | | DKLPETVLKENDSEKERSPNEK |
| | | | | | | GTWGSNLKRHPGSTPEEAHFV |
| | | | | | | RTQWGRSLELAGTLFPMNFMG |
| 1 | | 1 | | | | IIGVKEIK |
| 6441 | 36809 | Α | 6491 | I | 1020 | |
| 6442 | 36810 | A | 6492 | I | 330 | |
| 6443 | 36811 | С | 6493 | 250 | 372 | |
| 6444 | 36812 | Α | 6494 | 1 | 345 | |
| 6445 | 36813 | A | 6495 | 2 | 335 | TVRAYNVPQHAVGIVVNRQVK |
| ŀ | | | | | | GKIPAKRINVGIKHFKHSTS*EN |
| ļ | 1 | | | | | FLKRMKENDQKKKEAKEKVT |
| | 1 | | | | | WIQLKHQSAPPRE/AQCERTNG |
| | | | | l | | KEPELLEPLPYEFMHNTYIHIYV |
| | | | | l | | CVH |
| 6446 | 36814 | A | 6496 | 2 | 490 | |
| 6447 | 36815 | Α | 6497 | 150 | 536 | NCKISFLHFCYIFVKALKRISAL |
| | İ | 1 | | l | | SRGKILAKRINVRIEHIKHSKSR |
| | 1 | 1 | | | \ | DSFLKRVKENDQKKKEAKEKG |
| | | | | | | TWVQ/RKAPGKNLVYISLVLRA |
| | 1 | | | | 1 | L*G*DLTHHIIILFPFFFL**PAPP |
| | | | | | | REAHFVRTNGKEPELL |
| 6448 | 36816 | Α | 6498 | 54 | 553 | |
| 6449 | 36817 | A | 6499 | 131 | 803 | TMFCQTGSSVRRVGPGPWAEN |
| | | | | | | RTAMLRPCGGTFARKTRLSRLG |
| | | | | | | NSPKMNEQQRGKRRGTPIIMFS |
| | 1 | 1 | | i | 1 | KGLLRKHG\VVPLAHIFMR\IYK |
| | | 1 | | 1 | 1 | \KGDIVRHPRGMGYLVPKRELP |
| | 1 | | | | ĺ | PQSCYPWPKPGRSLTNVTPAML |
| | | l | | | | VGHLL*NKQV*GQRFLPKRNL |
| | | 1 | | 1 | | MWRI*APFRHFLRSPRLASLKT |
| | 1 | 1 | | 1 | | CGRENGSRKKERKPKGGKVTW |
| | | l | | | | GFQLKRRHLGFPPQEEATFLLK |
| | | L | | | | EPIGGREP |
| 6450 | 36818 | A | 6500 | I | 489 | |

| SEO ID | ISEO ID NO: | Met | SEO ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|-------------|---------|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 6451 | 36819 | A | 6501 | 29 | 2028 | ENEEEGEKMASTDYSTYSOAA |
| | | | | | | AQQGYSA\YTAQPTQGYAQTT |
| | 1 | | | | | OOAYGOOSYGTYGOPTDVSYT |
| | | | | | | QAOTTATYGQTAYATSYGOPP |
| | 1 | | | | | TGYTTPTAPQAY\SQPVQG\YGT |
| | | | | | | GAYDTTTATVT\TTQASYAAQS |
| | 1 | | | | | AYGTQPAYPAYGQQPAATCPT |
| | 1 | | | | | RTED*\NKPTETSQPQSSTGGYN |
| | İ | 1 | | | | QPSLGYGQSNYSYPQVPGSYP |
| 1 | | | | | | MQPVTAPPSYPPTSYSSTQPTSY |
| | | | | | | DQSSYSQQNTYGQPSSYGQQSS |
| | l . | | | | | YGQQSSYGQQPPTSYPPQTGSY |
| | | 1 | | 1 | | SQAPSQYSQQSSSYGQQSSFRQ |
| l | 1 | | | | | DHPSSMGVYGQESGGFSGPGE |
| | i | | | | i | NRSMSGPDNRGRGRGGFDRGG |
| | | | | | | MSRGGRGGGRGGMGSAGERG |
| | ŀ | | | | | GFNKPGGPMDEGPDLDLGPPV |
| | l | | İ | | | DPDEDSDNSAIYVQGLNDSVTL |
| | | | | | | DDLADFFKQCGVVKMNKRTG |
| | İ | l | | | | QPMIHIYLDKETGKPKGDATVS |
| | | l | | | | YEDPPTAKAAVEWFDGKDFQG |
| | | | | | | SKLKVSLARKKPPMNSMRGGL |
| | | | | | | PPREGRGMPPPLRGGPGGPGGP |
| | | | | | | GGPMGRMGGRGGDRGGFPPRG |
| | | | | | | PRGSRGNPSGGGNVQHRAGDW |
| | | | | | | QCPNPGCGNQNFAWRTECNQC |
| | | | | | | KAPKPEGFLPPPFPPPGGDRGRG |
| | | | | | | GPGGMRGGRGGLMDRGGPGG |
| | | 19 | | | i | MFRGGRGGDRGGFRGGRGMD |
| | | l | | | | RGGFGGRRGGPGGPPGPLME |
| | | <u></u> | | | | QMGGRRGGRGGPGKMDKGEH |
| 6452 | 36820 | Α | 6502 | 1 | 693 | |
| 6453 | 36821 | A | 6503 | 3 | 657 | |
| 6454 | 36822 | Α | 6504 | 1 | 434 | |
| 6455 | 36823 | A | 6505 | 208 | 443 | |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|----------------|------------|-------------------|-----------------------------|---|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 6456 | 36824 | Α | 6506 | 3 | 2650 | LLPAFLLLCSDSHFLQFCSQFAP |
| 0.150 | 5002 | 1 | | ľ | | RKTOGSGSVNNIQANIIAKKSN |
| | | | | | | NHLMKKNDQKFKDLPQMAGH |
| ŀ | | | | | | PIHHOAOGPPGAKNPQEOORRP |
| | | | | | | MGOTTLPAEQEESRVKCKNCG |
| | | | | | ļ | AFGHSARNKTCPIKRWSGALPL |
| ŀ | | | | | | QVLGSHKEKENLKPAKAQLPFT |
| | | | | | i | TPGPFTTNDREKERSPSSTMNPS |
| | | | | | | EMQRKASPRRWKHHNQTPSIH |
| ł | | | | | | KVNKMVMSEEOMKLPSTKKA |
| 1 | | | | | | EPPTWAQLKKLTQLPKKSLEN\ |
| | | | | | | TKVTQTPENTLLAALMIVST/A |
| | | l | | | | GAAAANYTYWAYVPFPPLIRA |
| | | 1 | | | | VTWMDNPIEVYVNNSAWVPGP |
| İ | | | | | 1 | TDDRCPDKPEEEGMMINISTGY |
| | | | | 1 | | RYPPICLGRAPACLMPAIONWL |
| | } | | ì | | | VEVPTVGTTSRFTYHTGLLTFR |
| 1 | | | | | | DVAIEFSOEEWKCLDPALEDSY |
| | | | | | | TRRKANSCGKPYKCNECGKAF |
| ŀ | | | | | | TQNSNLTSHRRIHSGEKPYKCS |
| | | | | | | ECGKTFTVRSNLTIHQVIHTGE |
| | į | | | | | KPYKCHECGKVFRHNSYLATH |
| | | | | 1 | | RRIHTGEKPYKCNECGKAFRGH |
| | | | | | | SNLTTHQLIHTGEKPFKCNECG |
| i | | | | | | KLFTQNSHLISHWRIHTGEKPY |
| 1 | | | | | | KCNECGKAFSVRSSLAIHQTIHT |
| 1 | | | | | | GEKPYKCNECGKVFRVGRGVSI |
| 1 | | 1 | | | | GTTCLLSVFQVITVSSRKSRASP |
| | | | | | | ENRATQSILILAPPTSRGSGPGP |
| | | | | | | ASVLRRLAQTRKRMAWTESCT |
| | | 1 | | | | AACAFPSCLVLLYRGRGVPTDL |
| | 1 | | | | | QVPAPLFSTQSKLKRPGSRTKSS |
| 6457 | 36825 | A | 6507 | 54 | 360 | CSTMNPSEMORIAPPRRORHRS |
| 0437 | 36823 | l ^A | 0307 | 34 | 300 | RAPSAHKMNRMVMSEEOMKL |
| | | | | | | PSTKKAEPPTWAQLKKLTQLA |
| | | | | 1 | | |
| | | | | | | KKK\LENTKVTQTPENMLLAAL |
| 6458 | 26926 | - | 6508 | 525 | 3656 | KTVSTVSAGVPSSSEESD SSTMNPSEMORKAPPRRRRHR |
| 0458 | 36826 | A | 6508 | 323 | 3030 | |
| 1 | | 1 | 1 | | | NRAPLTHKMNKMVTSEEQMK |
| | 1 | | | | | LPSTKKAEPPTWAQLKKLTQLA |
| | | | | | | TKYLEN\TKVTQTPENTLLAAL |
| | | | İ | | | MIVSMVVSLPMPAGAAAANYT |
| 1 | | | l | | | YWAYVPFPPLIRAVTWMDNPIE |
| 1 | | | l | | 1 | VYVNNSA WVPGPTDDHCP\AK |
| | | | 1 | | | PEEEGMMINISTGYRYPPICLGR |
| | | 1 | l | | i | APACLMPAIQNWLVEVPTVGT |
| | | | | | | TSRFTYHTIDLMTEKWVVLASV |
| | | | l | | 1 | EVLLRFPLKPGEDPTARYVSNK |
| | | L. | | Ļ | | KCQPSVDWPTTISQRRGY |
| 6459 | 36827 | A | 6509 | ! | 246 | |
| 6460 | 36828 | Λ | 6510 | 1 | 246 | |

| SEQ ID | ISEO ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|-------------|-----|------------|-------------------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 6461 | 36829 | A | 6511 | 1 | 279 | |
| 6462 | 36830 | A | 6512 | 1 | 363 | |
| 6463 | 36831 | c | 6513 | 109 | 245 | |
| 6464 | 36832 | A | 6514 | 2 | 429 | LMTFCWDTPRQSGVPRERMPH |
| 1 | | | | | | TGTWRTVGIRCPKKKLRSANSS |
| | | 1 | | | | MMRGKVQPFRP/DIQAYGAAPF |
| l | | | | | | EDLOVDFREMPKCGGNKYVLV |
| 1 | i | | | | | LGRTYSGWVEAYPTRTEKTRE |
| | | 1 | | | | VTPVLLRDLIRRFRPPLWIGSDN |
| | 1 | 1 | | | | GPAFLAALVQKTAK |
| 6465 | 36833 | c | 6515 | 31 | 895 | |
| 6466 | 36834 | Ā | 6516 | 2 | 4735 | |
| 6467 | 36835 | ÍÀ. | 6517 | 263 | 418 | |
| 6468 | 36836 | A | 6518 | 120 | 295 | YDPLPTWILGKISQRGAEEPAQ |
| 0.00 | 30030 | Ι., | 05.0 | .20 | | HPGCQL*LPPP/SPPRTSSSPSCA |
| | | i | | | | GLTSVSPRPRFPR |
| 6469 | 36837 | A | 6519 | ir - | 1758 | MKIRRRFPSSLQLSADLQVPVR |
| 0.05 | 30037 | Ι΄. | 0517 | ľ | 1 | KAPROGVSQEKRTKPSLELMIS |
| | 1 | 1 | | | | GTISOEDIRNNVTRGCTPPAIOR |
| | 1 | 1 | | | | VISSSPLLAIRNNVTEGVYTPCD |
| | 1 | 1 | | | | TGGRVHLPVILLLISRDGGHDIS |
| | | ł | | | | FNIAVDVHSPCDTDPNIQGVEY |
| | | 1 | | 1 | | DMTPNIAMNVQPPGTISQKRCT |
| 1 | 1 | | | | | LPAILGLISYASSVNIRSNITGWL |
| | 1 | l . | | | | YIDRYVGSHVILYPLGIRMGVT |
| 1 | 1 | | | | | GEMKGERRRGLHAATKWLEE |
| | | | | | | HAPADYONPOEYGRTOLPGTO |
| | 1 | 1 | | | | POLDPHEREDMORLNRDREAL |
| | | 1 | | | | LEGFKRGAQKATNVNKVSEVI |
| | l | 1 | | | | QGKEESPAQFHQRLCEACAKQ |
| | | 1 | | | | VLVNGDAVSREEKRKENERQA |
| | ŀ | 1 | | | | RRNADLLVSCSNOSGPPKEARE |
| | | 1 | | | | ELWTKDYRPGQDLRLLSQATL |
| | | 1 | | | | TFHPTVPSPSTLLGLLPAEDSWF |
| | | 1 | | 1 | | TCLDLKDAFFPIRSAPESOKLFA |
| | | 1 | | | | FQWEDPESALAKTVRQRCVSC |
| | | 1 | | | | RQHHA\GKVQPFRP/DIQAYGA |
| | | 1 | | 1 | | |
| 1 | | 1 | | 1 | 1 | AAFEDLQVDFTEMPECGGNKY LPVLGRTYSGWVETYPTRAEK |
| | | 1 | | | 1 | |
| | | 1 | | | I | AREVTRVLLRDLIPRLELPFRIG |
| | | 1 | | 1 | 1 | SDNGPAFVADLLQKTATVLGIT |
| | | 1 | | | | RKLHAASRPQSSGKGIQNNRTG |
| | 10000 | ١ | 1500 | ļ | 1242 | GVYTPCDIESHVILFRSGY |
| 6470 | 36838 | A | 6520 | 1111 | 1342 | MFVPHIGFQNTAALCLLRLGVL |
| | 1 | | | | 1 | FP*PVGFPAGSCLLI*WNRHWH |
| | | 1 | | | 1 | VPDFSCVTTPQEWCGGVSDVC |
| L | | 1 | | L | L | CGHPHAEPFHLQ |

| SEO ID | ISEO ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide Idention of last | Amino ncid sequence (X=Unknown, |
|--------------|-------------------------|----------|----------------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codna far last amino acid | |
| | sequence | | 09/540,217 | eodon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | 1 | | sequence | | |
| | | <u> </u> | | | | |
| 6471 | 36839 | A | 6521 | 1 | 1144 | MRGAQKATNVNKLSEDIQGKE |
| | | 1 | | | | ESPTQFYERLWEAYRMYTPFDP |
| | 1 | İ | l | | | DSPENQRMIPMALVRQSAEDM |
| | | l | | | | RRKLQKQAGLAGMNPSQLLEI |
| | | | | ł | | ASQVFVNRDAVSRKENGKENG |
| ŀ | | | l | | | GQARRYADLFSRTKNYQPVQD |
| | | | l | | | LRLLHQAKLTFHPTVPNPSTLL |
| 1 | | 1 | | | ŀ | GFPPAEDSWFTCLDLKDAFFPIR |
| l | | 1 | | | | LAPERQKLFAFQWEDPESGWPP |
| | | l | | | | CWRALAATALLVQEANKLTLG |
| | | l | | | | OKLNIKASRAVVTLMNTKGHH |
| | | | | | | WLTNATLTDYOTLLCENPRITIE |
| 1 | | | | | | VCNTLHPATLLPVSKSPVKPGC |
| 1 | | | | | | VEVLDSIDSSRPDLWDOPWASV |
| l | | | | | | DWELYLDGSSFFNPQGEVEG\S |
| 1 | | | | | | RGDTSELPPCWVCGIPALTORL |
| | | 1 | | | | EKQHLPPSGHQGSLKHLIWDLL |
| | | 1 | | | | LLTKKRTFSSMI |
| 6472 | 36840 | A | 6522 | 1 | 554 | LLTRRETT 33MI |
| 6473 | 36841 | В | 6523 | 63 | 620 | |
| 6474 | 36842 | Ā | 6524 | 1 | 796 | SRTKNYOPVODLRLLHOAKLT |
| 0474 | 30042 | l^ | 0.524 | ľ | 1,70 | FHPTVPNPSTLLGFPPAEDSWFT |
| | | | | | | CLDLKDAFFPIRLAPERQKLFAF |
| | | | | | | OWEDPESGWPPCWRALAATAL |
| | | ľ | | | | LVQEANKLTLGQKLNIKASRA |
| | | ľ | | | | VVTLMNTKGHHWLTNATLTD |
| ł | İ | ļ. | | 1 | | YOTLLCENPRITIEVCNTLHPAT |
| | | 1 | | i | | LLPVSKSPVKPGCVEVLDSIDSS |
| ŀ | | | l | | | |
| | 1 | l | | | | RPDLWDQPWASVDWELYLDG |
| ļ | | ŀ | | | | SSFFNPQGEVEG\SRGDTSELPP |
| 1 | | | | | ĺ | CWVCGIPALTQRLEKQHLPPSG |
| | 0.0010 | ļ | | | 2640 | HQGSLKHLIWDLLLLTKKRTFS |
| 6475 | 36843 | A | 6525 | 3 | 2640 | |
| 6476 | 36844 | Α | 6526 | 2745 | 3732 | IRIGKNYFKVHMEPKKSPHRQV |
| | | ł | | | | NPKPKEQSWRHHTT*LQTILQG |
| l | | 1 | | | | YSNQNSMPGPTPQ\PSTPAPGG |
| | | | | | | NLRNPQSSDLLQVTKQQGQAL |
| | | l | | l | | AIQREAPLHRIPAPEAIPWYFQP |
| 1 | 1 | 1 | | 1 | | QPATQLGSPPVDPPSSAMM/SR |
| ŀ | | | | | | RAHRSRGPDRQGYPLQGD*PGE |
| | 1 | 1 | | | | PRPQEH*RGHSQERLPSSEKQTP |
| | | 1 | | | | ICPPAQATQHPEEPDAHQPYKH |
| | 1 | l | | | | LFQVCAHQGHPVAQRRN*PGY |
| | | 1 | 1 | | | WERYHSAEDPELQPILAGLSLS |
| | | | | | | MYLVTVLRNLLIS |
| 6477 | | | | | 10/0 | |
| | 36845 | A | 6527 | 1 | 1860 | |
| 6478 6479 | 36845 36846 36847 | A A | 6527 6528 6529 | 1 | 1458 | |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|----------------|------------|-------------------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 6480 | 36848 | Α | 6530 | 3 | 515 | TISOKRCTLPAILGLISYASSVNI |
| | | | | | | RSNITGWLYIDRYVGSHVILYP |
| | | ŀ | | | | LGIRMGVTGEMKGERRRGLHA |
| | | 1 | | | | ATKWLEEHAPADYQNPQEYGR |
| | | l | | | ľ | TQLPGTQPQLDPHEREDMQRL |
| | | | i | | ŀ | NRDREALLEGFKRGAQKATNV |
| | | | | | | NKVSEVIQGKEESPAQFHQRLC |
| | | 1 | | | | EAYRMYTPLDHDSPENQRMIH |
| | | ŀ | | | ŀ | MALVRQSAEDMRRKLQKQAG |
| | | | | | | LAGMNPSQLLEIASQVFVNRDA |
| | | | | | | VSPKENSKENGGQARRHDDLF |
| | | | | | | SPVEPDCVEVLDSIHSSRPDLRD |
| | | | | | | QPWPSGDW/RTICGWEQLLQPP |
| | | | | | | RRERCRVCSDNPGH/WLLKPHR |
| | | 1 | ì | | | CPRPLQARKLNSLLSLGP*NSTR |
| | | _ | | | | DCVRPIVCILPLITIALKISA |
| 6481 | 36849 | В | 6531 | 96 | 2524 | |
| 6482 | 36850 | В | 6532 | 61 | 2025 | |
| 6483 | 36851 | Α | 6533 | 674 | 2913 | |
| 6484 | 36852 | В | 6534 | 120 | 1849 | |
| 6485 | 36853 | A | 6535 | 1 | 426 | |
| 6486 | 36854 | A | 6536 | 2 | 475 | |
| 6487 | 36855 | A | 6537 | 1 | 501 | |
| 6488 | 36856 | Α | 6538 | 15 | 593 | SMWWNSAREPCPWRIVDDCGG |
| | ļ | l | | | | AFTMGVIGGGVFQAIKGFRNAP |
| | | l | | | | VCRLLSEAPLFIYSCSRSVSPTV |
| | | l | | i | | NVSSERAESRPTLFMAVSLHMA WCLAHIGIRHRLRGSANAVRIR |
| | | l | | | | |
| | l | 1 | | | | APQIGGSFAVWGGLFSTIDCGL VRLRGKEDPWNSITSGA\LTGA |
| | | l | | | | VL\AARSAPLAM\VGSAMMGGI |
| | | l | | | | LL/ALIEGVSILL/TR*TATV |
| 6489 | 36857 | A | 6539 | 2 | 557 | RRFRASAMEEYAREPCPWRIVE |
| 6489 | 36857 | I ^A | 0239 | 2 | 337 | DCGGAFTMGVIGGGVFQAIKG |
| | | 1 | | | | FRNAPVGIRHRLRGSANAVRIR |
| | | l | | ł | | APQIGGSFAVWGGLFSTIDCGL |
| | | l | | | i | VRLR\GKEDPWNSIT\SGA\LTG |
| | | l | | | | |
| | | | | | | AVL\AAR\SGPLAMGGLQQ*WG |
| 1 | | | | | | GILFAPHLRAFGILLTRYTAQ\Q |
| | | | | | | FRNAPPFLEDP\SQ\LPPKDGTPA |
| | 25050 | - | 6540 | 222 | 2274 | \TGYP\SYQQYH |
| 6490 | 36858 | A | 6540 | 223 | 2274 | |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|----------|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion. \=possible nucleotide insertion) |
| | | l | | sequence | | |
| 6491 | 36859 | Α | 6541 | 2795 | 3762 | FLHFHLRNAVPHQQWNKAGW |
| | | | | | | RMTLRS*EKKASDDQITLSYGR |
| | | l l | | | | TFKPK/DKEVENFEQNLEECITR |
| | | ŀ | | | | ITNTEKCLKELMELKTKARELR |
| | | | | | | EECRSLRSRCDQLEERISVMED |
| | | | | | | EMNEMKREGKFREKRIKRNEQ |
| | | 1 | | | | SLQEIWDYVKRPNLRLIGVPES |
| | | | | | | DGENGTKLENTLQHIIQENFPN |
| | 1 | l | | | | LARQANVQIQEIQRTPQRYSSRI |
| | | l | | | | AIPRHIIVRFTKVEMKEKMLRA |
| | 1 | | | | | AREKGRVTLKGKPIRLTADLSA |
| | | 1 | | | | ETLQARREWGPIFNILKENNFQ |
| ł | | 1 | l | | | PRISYPAKLSFISEEEIKYLTDKQ |
| ł | i | 1 | | | | MVRDFVTTRPALKELLKEALN |
| ŀ | | | | | | MERNNRYQLLQNHAKF |
| 6492 | 36860 | Α | 6542 | 245 | 1293 | TGAVPIRPSWQRWGKNRTEKL |
| 1 | | 1 | | | | ETLKRRAPLLLQRNAVPHQQQ |
| 1 | | l | | | | NKAGWRMILTS*EKKASDDQIT |
| l | | l | | | ŀ | LSYGRTFKPK/DKEVENFEKNL |
| l | 1 | l | | | | EECITRITNTEKCLKELMELKTK |
| l | 1 | 1 | | | | APELREECRSLRSRCDQLEERV |
| l | | | | | | SAMEDEMNEMKREGKFREKRI |
| | 1 | | | | | KRNEQSLQEIWDYVKRPNLHLI |
| 1 | 1 | | | | | GVPESDVENGTKLENTLQDIIQ |
| | | 1 | | | | ENFPNLARQANVQIQEIQRTPQ |
| | | | | | | RYSSRRATPRHIIVRFTKVEMK |
| | | l | | | | EKMLRAAREKGRVTLKGKPIR |
| | | | | | l . | LTADLSAETLQARREWGPIFNIL |
| | i | | | | | KEKNFQPRISYPAKLSFISEGEIK |
| | l | 1 | | | | YFIDKQMLRDFVTTRPALKELL |
| | | | | | | KEALNMERNNRYQPLQNHAK |
| 6493 | 36861 | С | 6543 | 116 | 283 | |
| 6494 | 36862 | Α | 6544 | 51 | 281 | KSQNQLLSSKGEYADGQQDQV |
| | | 1 | | | | SIPAPSPYTLSGPQTQSCPVRPE |
| | | 1 | | | | LGL*GASSAVQAPAVRYLTRFL |
| | | <u> </u> | | | | LFVMSNLHSP |
| 6495 | 36863 | В | 6545 | 1 | 897 | |
| 6496 | 36864 | В | 6546 | 91 | 8030 | |
| 6497 | 36865 | Α | 6547 | 126 | 362 | |

| SEO ID | SEO ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 6498 | 36866 | A | 6548 | 936 | 2064 | ERADCLFKRKTNNQKGHLHRK |
| | 1 | | | | | PICTSPSSKTKSR*NHKDGEKTE |
| | ļ | | | | | OKNWKL*NAERLSSS/IRNAVP |
| 1 | 1 | | | | | HQQQNKAGWRMILTS*EKKAS |
| | 1 | | | | | DDQITLSYGRTFKPK/DKEVENF |
| | 1 | | | | | EKNLEECITRITNTEKCLKELME |
| | | | | | | LKTKARELHEECRSLRSRCDQL |
| l | 1 | 1 | | | | EERVSAMEDEMNEMKREGKFR |
| | | 1 | | | | EKRIKRNEQSLQEIWDYVKRPN |
| | | | | | | LRLIGVPESDVENGTKLENTLO |
| | | | | | İ | DIIQENFPNLARQANVQIQEIQR |
| | | | | | | TPORYSSRRATPRHIIVRFTKVE |
| | | | | | | MKEKMLRAAREKGQVTLKGK |
| | | | | | | PIRLTADLSAETLOARREWGPIF |
| 1 | | | | | | NILKEKNFQPKISYPAKLSFISEC |
| | | | | | | EIKYFIDKOMLRDFVTTRPALK |
| | | | | | | ELLKEELNMERNNRYQPLQNH |
| 6499 | 36867 | A | 6549 | I | 767 | MAGAPPPASLPPCSLILDCCASN |
| | | | | | | QRDSVGVGPSEPGVGYSLVVR |
| | | | | | 1 | RFLSRSEKRNIRVGVTRFSSEM |
| | | | | | | NPVPQMEMQKSPSSASLTLGA |
| | | | | | | VDRSCSYSAILAPPLGFCFYPLY |
| | | | | | i | ENSTLQSAKKRDAELANGALGI |
| | | | | | | IELNNDYTLKKVMKPLITSNTV |
| | 1 | | | | | TDEIERANVFKMNGKWYLFTD |
| | | | | | | SRGSKMTIDGINSNDIYMLGY/D |
| | 1 | | | | | IKLFNRPLQAAEQNRACAANGS |
| | | | | | | *SKRCDIHLLSLRSAASQRQQC |
| | | | | | | GYHKLHDKQRLLRG |
| 6500 | 36868 | В | 6550 | 50 | 327 | |
| 650I | 36869 | Α | 6551 | 333 | 1301 | FLHFHLRNAVPHQQWNKAGW |
| | | | | | | RMTLRS*EKKASDDQITLSYGR |
| | | 1 | i | | | TFKPK/DKEVENFEQNLEECITR |
| | | | | | İ | ITNTEKCLKELMELKTKARELR |
| | | 1 | | | 1 | EECRSLRSRCDQLEERISVMED |
| | | | | | | EMNEMKREGKFREKRIKRNEQ |
| | | | | | 1 | SLQEIWDYVKRPNLRLIGVPES |
| | | | | | | DGENGTKLENTLQHIIQENFPN |
| | | | | | 1 | LARQANVQIQEIQRTPQRYSSRI |
| | | 1 | | l | l | AIPRHIIVRFTKVEMKEKMLRA |
| | | | | | | AREKGRVTLKGKPIRLTADLSA |
| | 1 | | 1 | İ | | ETLQARREWGPIFNILKENNFQ |
| l | 1 | 1 | l | i | | PRISYPAKLSFISEEEIKYLTDKQ |
| l | | | l | | | MVRDFVTTRPALKELLKEALN |
| | | | 1 | | | MERNNRYQLLQNHAKF |
| 6502 | 36870 | Α | 6552 | 352 | 2304 | |
| 6503 | 36871 | A | 6553 | 1 | 1617 | |

| SEO ID | SEQ ID NO: | Met | SEO ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|------------|------------|--|-----------------------------|--|
| NO: | of peptide | hnd | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | l ' | l | | sequence | | |
| | | ᆜ | | | | |
| 6504 | 36872 | A | 6554 | I | 257 | MGPIHKISHYVYANISKSEKVL |
| | | l | | | | KSEHFRSQAFQPGQQSETVSEK |
| | ŀ | l | | | | KKKTRKKRKKRKKKKK |
| | | l | | ŀ | | KKKKKKKKKKKKKKKKK |
| | | 1 | | | | SE*DRLGKKEEDEEEEEEEEE |
| | ŀ | | | | i | EEEEEEEEEEEEEEE |
| | | | | | | EEEEEEEEEEEEEE |
| 6505 | 36873 | A | 6555 | 5 | 156 | RKKGGG/EREEEGEGEEEEEE |
| | | l | | | | EEEEEEEEEEEEEEEEVVL |
| | | 1 | | | | LTPGTGAEDFKKH |
| 6506 | 36874 | A | 6556 | 1 | 279 | |
| 6507 | 36875 | Α | 6557 | 3 | 120 | TEEEEEEEEEEEEEEEE |
| | | 1 | | | | EEEEEEEEEEEEGEEE\EEEE |
| 6508 | 36876 | A | 6558 | 3 | 123 | |
| 6509 | 36877 | Α | 6559 | 239 | 432 | CLWLFQEEEEEEEEEED*EEE |
| | | l | | | | EEE/EEEEEEEEEEEEEE |
| | | 1 | | | | EEEEEEEKIFLGHRVGI |
| 6510 | 36878 | A | 6560 | 1 | 588 | |
| 6511 | 36879 | A | 6561 | ti | 204 | |
| 6512 | 36880 | A | 6562 | 75 | 234 | |
| 6513 | 36881 | В | 6563 | 100 | 2510 | |
| 6514 | 36882 | A | 6564 | 47 | 4976 | |
| 6515 | 36883 | A | 6565 | 3 | 4755 | SCRCRRRRRGPAPAMAQILPVR |
| 0313 | 30883 | <u> </u> ^ | 0303 | ľ | 4733 | FOEHFOLONLGINPANIGFSTLT |
| i | | [| | | | MESDKFICIREKVGEOAOVTIID |
| | | 1 | | | | |
| İ | | 1 | | | | MSDPMAPIRRPISAESAIMNPAS |
| | | l | | | | KVIALKAGKTLQIFNIEMKSKM |
| | | 1 | | | | KAHTMAEEVIFWKWVSVNTV |
| | | 1 | | | | ALVTETAVYHWSMEGDSQPM |
| | | ı | | | | KMFDRHTSLVGCQVIHYRTDE |
| | | 1 | | i | | YQKWLLLVGISAQQNRVVGA |
| | | 1 | | | | MQLYSVDRKVSQPIEGHAAAF |
| 1 | | 1 | | | | AEFKMEGNAKPATLFCFAVRN |
| L | | | | | | PTGGKLHIIEVGQPAAGNQ |
| 6516 | 36884 | В | 6566 | 47 | 482 | |
| 6517 | 36885 | Α | 6567 | 1 | 555 | MNARPHKVD/GRVVEPKRAV* |
| | | 1 | | | | EDSQRP\AFVAGIKEDTEEHHLR |
| | | l | | | l . | DYFQQYGKMEVIEIMTDRGSG |
| | ı | | | | | KKRGFAFVTFDNHDSVDKTVV |
| | | l | | 1 | | OKYHTANDHNCEGRKALSKOE |
| | i | 1 | İ | | l | MASASSSORGHSSSGNFRGGHG |
| | | 1 | ١. | 1 | 1 | GGFGGNDIFGYGENFSGHGGFS |
| | | 1 | | | | GSCGGGGYGSSGGGYNEFGND |
| | | 1 | | | | GSNTGGGGSYNDFGN |
| 6518 | 36886 | A | 6568 | 1 | 645 | SST. SUGGET TENTON |
| 0219 | 120000 | 10 | 0308 | <u> </u> | 1045 | l |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|---------|------------|-------------------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 6519 | 36887 | A | 6569 | 2 | 944 | GRGLRKLFIGGLSF*FIDESLKS |
| 0517 | 50007 | 1 | 0507 | _ | | QVGEWGTLTDCVVMRDPNTK |
| | | | | | | RSRGFGFVTYAT\VEEVDAAMN |
| | | | | I | • | ARPHKVDGRVVEPKRAVSRED |
| | | | | l | | SORPGAHI/TLVKKIFVGGIKED |
| | | | | 1 | | TEEHHLRDYFEOYGKIEVIEIMT |
| | | | | | | DRGSGKKRGFA\FVTFDDHDSV |
| | | | | | | DKIVIOKYHTVNGHNCEVRKA |
| | | | | i | | LSKQEMASASSSQRGRSGSGNF |
| | | | | | | GGGRGGGGGNDNFGRGGNFS |
| | | | | | | GRGGFGGSRGGGGYGGSGDGY |
| | | | | | | NGFGNDGSNFGGGGSYNDFGN |
| 1 | | | | | | YNNQASNFGPMKGGNFGGRSS |
| | | 1 | | | | GPYG\GGGQYF\AKPR\NQGGY |
| | | 1 | | | | GGSSSSSSYGSGRRF |
| 6520 | 36888 | A | 6570 | 1 | 1512 | |
| 6521 | 36889 | Α | 6571 | 2864 | 3677 | RCQLDHLPCHLCCCCHR/CIPSL |
| | | | | | | RDPQQAPGSTRLSRAPHIESRV |
| | | | | | | GRKPPEEPANPTMNSLTLRDKQ |
| | | | | | | /HDASTC/DWKRAL*VPESGLPR |
| | | l | | | | ALLKYIRCPNMSSAQKPRELSK |
| | | | | İ | | RRN*K*PCVKRTPFRPT*E/DLP |
| | | | | ſ | | YSGKKTGVKGLICPVPGTAVK |
| | | | | ŀ | | APQRPPGPQQPHPAPQSASETA |
| l | | ŀ | | | | WFPVADRRVFSENPGWTAAKT |
| | | | | , | | LGTLSSPCQAGAGVGRQDGDP |
| | | | | | | GQELTSQEKPWVGRKIPEHAV |
| | 1 | | | | | ADKGYRQQCGAGEARGGPVF |
| | | | | | | WAAAPRTSWQQASYT |
| 6522 | 36890 | Α | 6572 | 1 | 666 | |
| 6523 | 36891 | Α | 6573 | 2926 | 3304 | EYSLGHRHYNWKC*ALGQKDQ |
| | | | | | | VTFATKFAPTSHRTRKQPELWR |
| | ŀ | | ł | | 1 | /QDPGSYGEKQPAWCSVPPGRF |
| | | | | | | SGGLVGLGFLDGGIVVQPLRRP |
| | | | | | | CCQDCVCGFPTLRSSTKTSTEL |
| | | <u></u> | | | | GPSFLPCERQGKETISVT |
| 6524 | 36892 | A | 6574 | 1 | 665 | |

| NO: of peptide sequence hod models of peptide sequence action of first code for peptide sequence addon for last amino actid "Stop coden," possible nucleotide insertion) acquerate 6525 36893 A 6575 3 1121 SSTFPRMPWRLVTSWTAVIPEL EGSTSDPSPAVAQKGEKPVK GNSLWGHTEPVPRRGTGPRP SFVHRLPTMDPHKVNALRAFV KMCKQLSVLHTKEMFIFLER WVESMGKLSPATQKVKSEP TKEKPDSKKVEEDLKADERS TKEKPDSKKVEEDLKADERS TKEKPDSKKVEEDLKADERS TKEKPDSKKVEEDLKADERS TKEKPDSKKVEEDLKADERS GESNLLIDNEDVIEPDPDAPQER GDENALTEEMMDQANHKKV. 6526 36894 A 6576 3 1351 PEAGGEREREAQREEEARGQSVAQY GNFKVM 6526 36894 A 6576 3 1351 PEAGGEREREAQREEDRGMPGNFPG GMPGMPG GMPGMPG GMPGMPG GMPGMPG GMPGMPG GMPGMPG GMPGMPG GMPG GMPGMPGMPGMPG GMPGMPGMPGMPG GMPGMPGMPGMPGMPGMPGMPGMPGMPGMPGMPGMPGMPG | SEQ ID | SEO ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--|--------|------------|-----|------------|------------|-----------------------------|--|
| Sequence Sequence STPPRMPWRLVTSWTAYIPEL | NO: | | | | | | |
| | 1 | sequence | 1 | 09/540,217 | | of peptide sequence | deletion, \=possible nucleotide insertion) |
| EGSTSDDSPAVAQKGEKPVK. | | | 1 | | sequence | | |
| EGSTSDDSPAVAQKGEKPVK. | 6525 | 126802 | 1. | 6575 | [2 | 11121 | CCTEDDA/DWDI V/TCW/TA VIDE! |
| GNSL WGSHTEPVPRPGTGPRPI SFVHRLPTMDPHKVNALRAFV KMCKQDLSVLHTKEMHELRE WVESMGGKLSPATQKVYKSEE TKEKPPDSKKVEEDLKADPES EESNLLIDNEDVIEPDPDAPQE GDENAEITEEMMDQANHKKV. AIEALNGGLQKAIDLFTDAIK NPQLAILYAKRASVFIKLQKPN AAIRDCDRAVEITYSAQPYKWE GKYEQKREEREIKERIERVKA REEQERAQREERARGQSVAQY GSFPDGLPGGMLEMRGGMPGI POITGLNEIFSDPEVLAAVQDPI VMV/AFFQDVAQNPANMSQY GNPKVM PEAGGERERERAQREEDSTRQ; RAQYGSFTGGFPGGMPGNFPG GMPGMGGPSARSRAQRISLE PDRSPPSYAHILPTMDPRRVN) LEAFEKMCKQDPSVLHTEEMR FLIRECVESMGGKVPPATHKAN SEENTTEEKPDSEKAEEDLQAL EPSSEESDLRKLIKEGVIEPDTD APQEMGDENAEIPEEMMDQA NDKKVAAIEALNDGELQKAID FTDAIKLNPRLAILYAKRASVY VKLQKPNAAIRALNGGLQKAID FTDAIKLNPRLAILYAKRASVY VKLQKPNAAIRALNGGELQKAID FTDAIKLNPRLAILYAKRASVY VKLQKPNAAIRALNGGELQKAID FTDAIKLNPRLAILYAKRASVY VKLQKPNAAIRALLOHWEE AAHDLALACKLDVDEDASAM KEVQPRAQKIAEHRRKYYERK EEREIKERIERVKKAEEHERA QREEEARRQSGAQYGSPPGGFI GGMFONFFGGMPOMGGGMPC MAGMPGLNEILSDEPVLAAMC DPEVMVARQPVAQNPANMSK YQSNRVMNILSKLSAKFGGG GGMFONFFGGMPOMGGGMPC MAGMPGLNEILSDEPVLAAMC DPEVMVARQPVAQNPANMSK YQSNRVMNILSKLSAKFGGG GFMFONFFGGMPOMGGGMPC MAGMPGLNEILSDEPVLAAMC DPEVMVARQPVAQNPANMSK YQSNRVMNILSKLSAKFGGG GFMFONFFGGMPOMGGGMPC MAGMPGLNEILSDEPVLAAMC DPEVMVARQPVAQNPANMSK YQSNRVMNILSKLSAKFGGG GMFONFFGGMPCMGGGMPC MAGMPGLNEILSDEPVLAAMC DPEVMVARQPOVAQNPANMSK YQSNRVMNILSKLSAKFGGG GMFONFFGGMPCMGGGMPC MAGMPGLNEILSGKSAKFGGC GMFONFFGGMPCMGGGMPC MAGMPGLNEILSGKSAKFGGG GMFONFFGGMPCMGGGMPC MAGMPGLNEILSGKSAKFGGC GMFONFFGGMPCMGGGMPC MAGMPGLNEILSGKSAKFGGC GMFONFFGGMPCMGGGMPC MAGMPGLNEILSGKSC CRTFFSHTALKRHLRSHTGDF PPECEPCGSCTRDE PPECEPCGS | 6523 | 30893 | A | 63/3 | 3 | 1121 | |
| SSEVHRLPTMOPHIKVNALRAFY KMCKQDLSVLHTKEMHFLRE WYESMGKLSPATQKYKSEEP TKEEKPDSKKVEEDLKADFES EESNLLIDNEDVIEPPDPAPQEP GOENALITEEMMDQANHKKV AIEALNDGELQKAIDLFTDAIK NPQLAILYAKRASVFIKLQKFW AAIRDCDRAVEIYSAQPYKWE GKYEQKREEREIKERIERVKKK REEQERAQREEEARGQSVAQV GSFPPGLPGGMEMERGGMFG PGITGLNEIFSDPEVLAAVQDPI VWYIAFFQDVQNPANNSQYY GNPKVM 6526 3 1351 PEAGGEREERAQREEDSTRQ: RAQYSSTTGGFGGMFGNFG GMFGMGGPSARSRAQRLSLE PDRSPSYAHHLPTMDPRR.VNI LRAFEKMCKQDFSVLHTEEME FLIRECVESMGGKVPPATHKAN SEENITEEKPDSEKAEEDLQAG EFSSESDLRKLIKEGVIEPDD APQEMGENAEREEMDQA APDEMGENAEREEMDQA NDKKVAAIEALNDGELQKAID FTDAIKLNPRLAILYAKRASVF VKLQKPNAAIRDCDRALEINPE SAQPYKWRGKAHRLLGHWEE AAHDLALCKLDVTEDDSAM KEVQPRAQKIAEHRKYSERR EEREIKERIERVKKAREEHERA QREEGARROSGAQYGSPFGGFI GGMFGNFFGGMFGMFGGGMFC MAGMGELSEILSDEFEVLANM KEVQPRAQKIAEHRKYSERR EEREIKERIERVKKAREEHERA QREEGARROSGAQYGSPFGGFI GGMFGNFFGGMFGMGGGMFC MAGMGELSEILSDEFEVLANM DPEWMVARQDVAQNPANMSK YQSNPKVMNLISKLSAKFGGQ GGMFGNFFGGMFGMGGGMFC MAGMGELSEILSDEFEVLANM DPEWMVARQDVAQNPANMSK YQSNPKVMNLISKLSAKFGGQ GFINLSSPRGGILKTYGGELC KRFLDSLRRMHLLAHSAGAK AFVCDQCGAGFSKEDALETHR QTHTGTTDMAVFCLLCGKRFQA QSVALQHMEVHAGVRSVICSE CNRTFPSHTALKRHLRSHTGDI PYECEFCGSCFRDE | 1 | | | | | | |
| KMCKQDLSVLHTKEMHELRE | | ł | 1 | | | | |
| ### WYESMGGKLSPATQKVKSEE TKEEKPDSKKVEEDLKADEPS: EESNLLIDNEDVIEPPPDAPQEP GDENAEITEEMMDQANHKKV. AIEALNIDGELQKAIDL-FTDAIK NPQLAILYAKRASVFIKLQKPN AAIROCDRAVEITYSAQPY KW# GKYEQKREEREKERIERVKKA REEQERAQREEEARGQSVAQY GSPFDGLPGGMERMGGMGI POITGLNEISDPEVLAAVQDPI VMV/AFPQDVAQNPANMSQYG GNPKVM 6526 36894 A 6576 3 1351 PFAGGERERERAQREEDSTRQI RAQYGSTTGGFGGMFGNFGG GMFGMGGPSARSRRAQRLSLE PDRSPSYAHHLPTIDPRRKVI) LRAFEKMCKQDPSVLHTEEMR FLIRECVESMCGKVPPATHKAN SEENTTEEKPDSEKAEDLQAG EPSSESDLRKLIKEGVIEPDTD APQEMGDENAEIPEEMMDQA NDKKVA AIEALNDGELQKAID FTDAIKNPRLAILYAKRASVF VKLQKPNAAIRDCDRAIEINFT SAQPYKWRGKAHRLLGHWEE AAHDLALACKLDVTEDASAM KEVQPRAQKIAEHRIKYSPKR EEREIKERIERVKKAREEHERA QREEEARRGSGQYGSFPGGFI GGMGNTGNFFGGMPGMGGGMPC MAGMGELNEILSDPEVLAMM DPEMVARGDVAQNPANMSK YQSNRVMNLISKLSAKFGGQ GGMGTGNFFGGMPGMGGGMPC MAGMGELNEILSDPEVLAMM DPEMVARGDVAQNPANMSK YQSNRVMNLISKLSAKFGGG GGMFGNFFGGMPGMGGGMPC MGMGPGLNEILSDPEVLAMM DPEMVARGDVAQNPANMSK YQSNRVMNLISKLSAKFGGG GTHTOTTDMAVFCLLCGKRFQA QSVALQHMEVHAGVRSVICSC CNRTFPSHTALKRHLRSHTGDI PPECEPCGSCTRDE | | | 1 | | | | |
| ### TREEKPPSKKVEEDI.KA.DFESS ### EESNLLIDNEDVIEPDPDAPQES GOENAEITEEMMDQANHKKV. AIEALNIGGELQKAIDL-TIDAIK NPQLAIL-YAKRASYPIKLQKFW AAIROCDRAVEIYSAQPYKWE GKYECKREEREIKERIIERVKA REEQERAQREEBERGQSVAQV GSFPDGLPGGMLEMRGGMFGI PGITGILNEIRSDEVLAAVQPDI VMV/AFFQDVAQNPANMSQYG GMPKVM ### GRYECKREREIKERIIERVKA ### AAYOSFTGGFPGGMFGFG GMPKGMGSPASRRAQRISLE PDRSPPSYAHHLPTMDPRRVNI LRAFEKMCKQDPSVLHTEEME FLRECVESMGGKNPPATHKAN SEENITTEEKPDSEKAEEDLQAE PSSESESLIRKLIKGOVIEPDTD APQEMGDENAEIPEEMMDQA NDKKVAAIEALNDGELQKAID FTDAIKLNPRLAILVAKRASYP VKLQKPNIAAIROCDRAIEINPE SAQPYKWRGKHALLGHWEE AAHDLALACKLDYDEDASAM KEVQPRAQKIAEHRRKYBER EEREIKERIERVKKAEEHERA QEEEARRQSGAQYGSPFGGFI GGMPONFPGGMPGMGGMPC MAGMGLISDFEVLAAMQ DPEVMVARQDVAQNPANMSK YQSNRVMNISKLSAKFGGQ GMRGMCGAGRAG GS27 36895 A 6577 2 433 GPPLNLSSPRGGILKTYGGELCK KRFLDSLRLRMHLLAHSAGAK AFVCDQCGAGFSKEDALETIR QTHITGTDMAVFCLLCGKRPQA QSSALQHMEVHAGVRSYCSE CNRTFPSHTALKRHLRSHTGDI PYECEPCGSCFRDE | | t | 1 | | | | |
| EESNLLIDMEDVIEPDPDAPOER GDENAEITEEMMDQANHKKV. AIEALNOGELQKAIDLITDAIK NPQLAILYAKRASVPIKLQKPN AAIRDCDRAVEITSAQPYKWE GKYEQKREEREIKERIERVKKA REEQERAQREERARGQSVAQY GSFPDGLPGGMLEMRGGMFGI POITGLNEIFSDPEVLAAVQDPI VMV/AFFQDVAQNPANMSQYY GNPKVM 6526 36894 A 6576 3 1351 PEAGGERERRAQREDSTRQI RAQYGSTTGGFPGGMPGNFPG GMFGMGGPSARSRAQRISLE PDRSPPSYAHILPTMDPRKVN) LRAFEKMCKQDPSVLHTEEMR FLIRECVESMGGKVPPATHKAN SEENTTEEKPDSEKAEEDLQAL EPSSEESDLRKLIKEGVIEPDTD APQEMGDENAEIPEEMMDQA NDKKVAAIEALNDGELQKAID FTDAIKLNPRLAILYAKRASVY VKLQKPNAAIRDLODRAIENPE SAQPYKWRGKAHRLLGHWEE AAHDLALACKLDVDEDASAM KEVQPRAQKIAEHRRKYERKR EEREIKERIERVKKAEEHERA QREEEARRQSGAQYGSPPGGFI GGMGNFGFFGGMPGMFGGGMPC MAGMPGLNEILSDPEVLAAMC DPEVMVARQDVAQNPANMSK YQSNRVMNLISKLSAKFGGG 6527 36895 A 6577 2 433 GPPLNLSSPRGGILKTYGCELCC KRFLDSLRRMHLLAHSAGAK AFVCDQCGAGPSKEDALETHR QTHTGTTDMAVFCLLCGKRPQA QSSALQHMEVHAGVRSVICSS CNRTFPSHTALKRHLRSHTGDI PYECEPCGSCTRDE | | ŀ | ı | | | | |
| GDENAEITEEMMDQANHKKV | | l | | | | | |
| AIEALNOGELQKAIDLFTDAIK NPQLAILYAKRASYFIKLQKPN AAIRDCDRAVEITYSAQPY KW GKYYEQKREREIKERILERVKKA REEQERAQREERAGQSVAQV GSFPDGLPGGMLEMRGGMFGI PGITGLNEIFSDPEVLAAVQDPI VMV/AFPQDVAQNPANMSQY GMPKVM GMPKVM GMPKVM GMPKVM PEAGGERERERAQREDSTRQ: GMPKVM GMPKVM GMPKVM GMPKVM GMPKVM GMPKVM GMPKVM LEAFEKMCKQDPSVLATEEMR FLRECVESMGGKVPATHKAN EENTTEEKPDSEKAEEDLQAI EPSEESDLRLIKEGVIEPDTD APQEMGDENAEIPEELMMDQA NDKKVAAIEALNDGELQKAID FTDAIKLNPRLAILVAKRASVF VKLQKPNIAAIROCDRAIEINPE SAQPYKWRGKAHRLIGHWEE AAHDLALACKLDVDEDASAM KEVQPRAQKIAEHRRKYERKR EEREIKERIERVKKAEEHEREA QREEEARRQSGAQYGSPFGGFI GGMPGNFPGGMPGMGGGMPC MAGMPGLNEILSDPEVLAAMC DPEVMVARQPVAQNPANMSK YQSNPKVMNLISKLSAKFGGG GMPGNFPGGMPGMGGGMPC MAGMPGLNEILSDPEVLAAMC DPEVMVARQPVAQNPANMSK YQSNPKVMNLISKLSAKFGGG GMPGNFPGGMPGMGGGMPC MAGMPGLNEILSDPEVLAAMC DPEVMVARQPVAQNPANMSK YQSNPKVMNLISKLSAKFGGG GMPGNFPGGMPGMGGGMPC MAGMPGLNEILSDPEVLAAMC DPEVMVARQPVAQNPANMSK YQSNPKVMNLISKLSAKFGGG GMPGNFPGGMPGMGGGMPC MAGMPGLNEILSDPEVLAAMC DPEVMVARQPVAQNPANMSK YQSNPKVMNLISKLSAKFGGG GMPGNFPGGMPGGGMPC GMPGNFPGGMPGGGMPC GMPGNFPGGMPGMGGGMPC GMPGNFPGGMPGMGGGMPC GMPGNFPGGMPGMGGGMPC GMPGNFPGGMPGMGGGMPC GMPGNFPGGMPGMGGGMPC GMPGNFPGGMPGMGGMPC GMPGNFPGMPGMGGMPC GMPGNFPGGMPGMGGMPC GMPGNFPGGMPGMGGMPC GMPGNFPGMPGMPGMPGMPGMPGMGGMPC GMPGNFPGMPGMPGMGGMPC GMPGNFPGMPGMGGMPC GMPGNFPGMPGMPGMGGMPC GMPGNFPGMPGMPGMGGMPC GMPGNFPGMPGMPGMGGMPC GMPGNFPGMPGMPGMPGMGGMPC GMPGNFPGMPGMPGMGGMPC GMPGNFPGMPGMPGMP | | İ | 1 | | | | |
| NPQLAILYAKRASVFIKLQKPN | | | 1 | | | | |
| AAIRDCDRAVEITYSAQPYKWE GKYPQKREERBIKERIERVKKA REEQERAQREERBIRGSVAQY GSFPDGLPGGMLEMRGGMFGI PGITGLNEIRSDEVLAAVQDP VMV/AFPQDVAQNPANMSQYG GNPKVM PFAGGERERERAQREEDSTRQ! RAQYGSTTGGFPGGMPGNFG GMPMGPSSRSRAQRISLE PDRSPPSYAHHLPTMDPRRVNI LRAFEKNCKQDPSVLHTEEMR FILRECVESMGGKVPPATHKAN SEENITTEEKPDSEKAEEDLQAL EPSSEEDLRKLIKGVIEPDTD APQEMGDENAEIPEEMMDQA NDKKVAAIEALNDGELQKAID FTDAIKLNPRLAIL/AKRASY VKLQKPNIAAIRODGRAEINPE SAQPYKWEGKAHLLGHWEE AAHDLALACKLDYDEDASAM KEVQPRAQKIAEHRRKYERK EEREIKERIERVKKAEEHERA QREEARRQSGAQYGSPGGF GGMPGNFPGGMPGMGGMPC MAGMPGLNEILSDEVLAAMG DPEWMVARQDVAQNPANMSK YQSNKVMBLISLSAKFGGG GGPLNLSSPRGGILKTYGGELCK KRILDSLRIKMILLAHSAGAK AFVCDQCGAGFSKEDALETHR QTHITOTDMAVELLCGKRPQ QSIALQHMEVELAGVRSYCSC CNRTFPSHTALKRHLRSHTGD PPECEPCGSCTRDE 1 687 | | | 1 | | | | |
| GKYEQKREEREIKERIERVKAR REEQERAQREERARGQSVAQY GSFPDGLPGGMLEMRGGMPGI PGITGLNEIFSDPEVLAAVQDPI VMY/AFFQDVAQPANMSQYY GNPKVM 6526 36894 A 6576 3 1351 PEAGGEREERAQREEDSTRQ: RAQYGSFTGGFPGGMPGNFPG GMPGMGGPSARSRRAQRISLE PDRSPPSYAHILPTMDPRKVN) LRAFEKMCKQDPSVLHTEEMR FL'RECVESMCGKVPPATHKAN SEENTTEEKPDSEKAEEDLQAL EPSSEESDLRKLIKEGVIEPDTD APQEMGDENAEIPEEMMDQA NDKKVAAIEALNDGELQKAID FTDAIKLNPRLAILVAKRASVY VKLQKPNAAIRDCDRAIENPE SAQPYKWRGKAHRLLGHWEE AAHDLALACKLDVTEEDASM KEVOPRAQKIAEHRRKYERKR EEREIKERIERVKKAEEHERA QREEEARRQSGAQYGSPPGGFI GGMGNFFGGMPGMGGGMPC MAGMPGLNEILSDPEVLAAMG DPEVMVARQDVAQNPANMSK YQSNPKVMNLISKLSAKFGGG 6527 36895 A 6577 2 433 GPPLNLSSPRGGILKTYGCELCC KRFLDSLRRMHLLAHSAGAK AFVCDQCGAGPSKEDALETHR QTHTGTTDMAVFCLLCGKRFQA QSSALQQHMEVHAGVRSYCSC CNRTFPSHTALKRHLRSHTGDI PYECEPCGSCTRDE | | | | | | | |
| REEQER AQREELARGGSV AQY GSFPDGLPGGMLEMRGGMPGI PGITGLNEIISPEVLAAVQpDI VMV/AFFQDVAQNPANMSQY(GNPKVM 6526 36894 A 6576 3 1351 PEAGGERERERAQREEDSTRQ: RAQYGSFTGGFPGGMPGNFPG GMPGMGGPSARSRAQRISLE PDRSPPSYAHHLPTMDPRRVNI LRAFEKMCKQDPSYLHTEEMR FLNECVESMCGKVPPATHKAN SEENITEEKPDSEKAEEDLQAL EPSSEESDLRKLIEGVIEPDTD APQEMGDENAEIPEEMMDQA NDKKVAAIEALNDGELQKAID FTDAIKLNPRLAILVAKRASVY VKLQKPNIAAIRODGRAEINPE SAQPYKWRGKAHRLIGHWEE AAHDLALACKLDVDEDASAM KEVQPRAQKIAEHRRKYERKR EEREIKERIERVKKAREEHERA QREEEARRQSGAQYGSPPGGFI GGMPONFPGGMPGMGGGMP MGGMPGFGGMPGMGGMP MGGMPGMGGMP MGGMPGMGGMP MGGMP MGMPGMGGMP MGGMP MGMPGMGGMP MGGMP MGMGMGMG | | l | 1 | | | | |
| GSFPDGLPGGMLEMRGGMFGI | | l | ı | | | | |
| PGITGLNEIFSDEVLAA VQDPP | | l | 1 | | | | |
| VMV/AFPQDVAQNPANMSQY(| | | ļ | | | | |
| 6526 36894 A 6576 3 1351 PEAGGEREERAQREEDSTRQ: RAQYGSTTGGFPGGMPGNFPG GMPGMGGPSARSRRAQRISLE PDRSPPSYAHILPTMDPRRVN) LRAFEKMCKQDPSVLHTEEMR FL\RECVESMCGKVPPATHKAN SEENTTEEKPDSEKAEEDLQAL EPSSEESDLRKLIKEGVIEPDTD APQEMGDENAEIPEEMMDQA NDKKVAAIEALNDGELQKAID FTDAIKLNPRLAILVAKRASVY VKLQKPNIAAIRDCDRAIEINPE SAQPYKWRGKAHRLLGHWEE AAHDLALACKLDVTEEDASAM KEVOPRAQKIAEHRRKVYERKR EEREIKERIERVEKKAEEHERA QREEEARRQSGAQVGSFPGGFI GGMFONFFGGMPGMGGGMPC MAGMPGLNEELSDEPEVLAAM DPEVMVARQDVAQNPANMSK YQSNPKVMNLISKLSAKFGGG 6527 36895 A 6577 2 433 GPPLNLSSPRGGILKTYGCELCC KRFLDSLRRMHLLAHSSGAK AFVCDQCGAGPSKEDALETHR QTHTGTTDMAVFCLLCGKRFQA QSSALQQHMEVHAGVRSYCSC CNRTFPSHTALKRHLRSHTGDI PYECEPCGSCFRDE | | | | ŀ | | | |
| | | ļ | l | | | | |
| RAQYGSFTGGFPGGMPGNFPG GMPGMGGPSARSRAQRLSLE PDRSPPSYAHHLPTMDFRRVN) LRAFEKMCKQDPSVLHTEEM FLRECVESMGGVPPATHKAN SEENTTEEKPDSEKAEEDLQAL EPSSESDLRALIKGVIPPDTD APQEMGDENAEIPEEMMDQA NDKKVAAIEALNDGELQKAID FTDAIKLNPRLAILVAKRASVY VLLQKPNIAAIRDCDRAIEINPE SAQPYKWRGKAHRLLGHWEE AAHDLALACKLDVDEDASAM KEVQPRAQKIAEHRRKYERKR EEREIKERIERVKAEEHERA QEEEARRQSGAQYGSPFGGFI GGMPGNFPGGMPGMGGGMPC MAGMPGLNEILSDPEVLAAMC DPEVMVAFQDVAQNPANMSK YQSNPKVMNLISKLSAKFGGG 6527 36895 A 6577 2 433 GPPLNLSSPRGGILKTYGCELCG KRFLDSLRIRMIHLAHASGAK AFVCDQCGAGPSKEDALETHR QTHTGTDMAVFCLLCGKRFQA QSSALQQHMEVHAGVRSYCSS CNRTFPSHTALKRHLRSHTGDI PYECEPCGSCTRDE | | | ┖ | | | | |
| GMPGMGGPSARSRRAQRI.SLE PDRSPPSYAHHLPTMDPRR.VNI LRAFEKMCKQDPSVLHTEHRM FIJRECVESMGGKVPPATHKAN SEENITEEKPDSEKAEEDLQAG EPSSESDLRKLIKEGVIEPDTD APQEMGDENAEIPEEMMDQA NDKKVAAIEALNDGELQKAID FTDAIKLNPRLAILVAKRASVF VKLQKPNAAIRDCDRAEIMPF SAQPYKWRGKAHRLLGHWEE AAHDLALACKLDVEEDASAM KEVQPRAQKIAEHRRKYERKR EEREIKERIERVKKAREEHERA QREEAAROSGAQYGSPPGGF GGMPGNFPGGMPGMGGGMPC MAGMPGLNEILSDPEVLAAM DPEMVARQPOVAQNPANMSK YQSNPKVMNLISKLSAKFGGQ G6527 36895 A 6577 2 433 GPPLNLSSPRGGILKTYGCELC KKFLDSLRRMHLLAHSAGAK AFVCDQCGAGPSKEDALETHR QTHIGTDMAVFCLLGGKRFQA QSNLQHMEVHAGVRSVICS CNRTFPSHTALKRHLRSHTGDI PVECEPCGSCFRDE 6528 36896 A 6578 1 687 | 6526 | 36894 | Α | 6576 | 3 | 1351 | |
| PDRSPPSYAHHLPTMDPRRVNI | | i | | | | | |
| LRAFEKMCKQDPSVLHTEEMR FL\RECVESMCGKVPPATHEAMR FL\RECVESMCGKVPPATHKAN SEENTTEEKPDSEKAEEDLQAL EPSSEESDLRKLIKEGVIEPDTD APQEMGDENAEIPEEMMDQA NDKKVAAIEALNDGELQKAID FTDAIKLNPRLAILVAKRASVF VKLQKPNAAIEALNDGELQKAID FTDAIKLNPRLAILVAKRASVF VKLQKPNAAIRDCDRAIEINPT SAQPYKWRGKAHRLLGHWEE AAHDLALACKLDVTEEDASAM KEVOPRAQKIAEHRRKVYERKR EEREIKERIERVKKAEEHIERA QREEEARRQSGAQVGSFPGGFI GGMFÖNFFGGMPGMGGGMPC MAGMPGLNEILSDEPVLAAMM DPEVMVARQDVAQNPANMSK YQSNFKVMNLISKLSAKFGGG FTDAINSKLSAKFGGG GFTTTTTTMAVFCLLCGKRFQA QSVALQHMEVHAGVRSVICSS CNRTFPSHTALKRHLRSHTGDI PYECEPCGSCFRDE | | ! | 1 | | | | |
| FIJRECVESMGGKVPPATHKAN SENTTESKPDSEKAEEDLQAL EPSSESDLRKLIKEGVIEPDTD APQEMGDENAEIPEEMMDQA NDKKVA AIBALNDGELQKAID FTDAIKLNPRLAILYAKRASVF VKLQKPNIAAIRDCDRAIEINPI SAQPYKWBGKAHRLLGHWEE AAHDLALACKLDVDEDASAM KEVQPRAQKIAEHRRKYERKR EEREIKERIERVKKAREEHERA QREELARRQSGAQYGSPPGGFI GGMPNFFGGMPGMGGGMP MAGMPGLNEILSDPEVLAAMQ DPEVMVAFQDVAQNPANMSK YQSNPKVMNLISKLSAKFGGG KRFLDSLRIKHLAHSAGAK AFVCDQCGAGFSKEDALETHR QTHTGTTDMAVFCLLCGKRFQA QSIALQQHMEVHAGVRSVICS CNRTFPSHTALKRHLRSHTGDF PYECEFCGSCFRDE | | | | | | | |
| SEENTTEEKPOSEKAEEDLQAT | | | | | | | |
| EPSSEESDLRKLIKEGVIEPOTD | | l | | | | | |
| APQEMGENAEIPEEMMDQA NDKKVAAIEALNDGELQKAID FTDAIKLNPRLAILVAKRASVY VKLQKPNIAAIRODGRAEINPE SAQPYKWRGKAHRLICHWEE AAHDLALACKLDVDEDASAM KEVPRAQKIAEHRKYERKR EEREIKERIERVKKAREEHERA QREEEARRQSGAQYGSPPGGFI GGMPNFFGGMPGGGMP MAGMPGLNEILSDPEVLAAMQ DPEVMVAFQDVAQNPANMSK YQSNPKVMNLISKLSAKFGGO KRFLDSLRIKHLICHWEE AHDLALACKLDVDEDASAM KEVPRAQKIAEHRAGAGK AGGEGARQSGAQYGSPGGFI GGMPNFFGGMIKTYGGELCK KRFLDSLRIKHHLLAHSAGAK AFVCDQCGAGFSKEDALETHR QTHTGTTDMAVFCLLCGKRFQA QSIALQQHMEVHAGVRSYICSE CNRTFPSHTALKRHLRSHTGDF PVECEFCGSCFRDE | | 1 | | | | | |
| NDKKVA AIEALNOGELQKAID FTDAIKLNPRLAILYAKRASVF | | | | | | | |
| FTDAIKLNPRLAIL VAKRASVF | | l | 1 | | | | |
| VVLQKPNIAAIROCDRAIEINPT SAQPYKWRKARHLIGHWEE AAHDLALACKLDYDEDASAM KEVQPRAQKIAEHRRKYPERK EEREIKERIERVKKAEEHERA QREEEARRQSGAQYGSPFGGFI GGMPGNFPGGMPGMGGMPC MAGMPGLNEILSDFEVLAAMC DPEVMVAFQDVAQNPANMSK YQSNFKVMNLISKLSAKFGGG SASSPKVMNLISKLSAKFGGG A 6577 2 433 GPPLNLSSPRGGILKTYGCELCC KRFLDSLR.RMHLLAHSAGAK AFVCDQCGAGFSKEDALETHR QTHTGTDMAVFCLLCGKRFQA QSGAQQHMEVHAGVRSYICS CNRTFPSHTALKRHLRSHTGDF PVECEPCGSCFRDE C528 36896 A 6578 1 687 | | | | | | | |
| SAQPYKWRGKAHRLLGHWEE | | | 1 | | | | |
| AAHDLALACKLDYDEDASAM | | i | 1 | | | | |
| KEVOPRAQKIAEHRRKYERKR EEREIKERIERVKKAREEHERA QREEEARROSGAQYGSPFGGF GGMPÖNFPGGMPÖMGGGMPC MAGMPGLNEILSDPEVLAAM DPEVMVARODVAQNPANMSK YQSNRKVMNLISKLSAKFGGO KRFLDSLRRMHLLAHSAGAK AFVCDQCGAGPSKEDALETHR QTHTGTDMAVFCLLCGKRFQA QSALQQHMEVHAGVRSVICES CNRTFPSHTALKRHLRSHTGDH PVECEFCGSCFRDE 6528 36896 A 6578 1 687 | | ı | 1 | | | | |
| EEREIKERIERVKKAREEHERA | | l | 1 | | | | |
| QREEEARRQSGAQYGSPFGGF GGMPGNFPGGMPGMGGGMPC MAGMPGLNEILSDFEVLAMMC DPEVMVAFQDVAQNPANMSK YQSNPKVMNLISKLSAKFGGO 6527 36895 A 6577 2 433 GPPLNLSSPRGGILKTYGCELCC KRFLDSLRLRMHLLAHSAGAK AFVCDQCGAGFSKEDALETHR QTHTGTDMAVFCLLCGKRFQA QSSALQQHMEVHAGVRSYICSE CNRTFPSHTALKRHLRSHTGDI PYECEPCGSCFRDE 6528 36896 A 6578 1 687 | 1 | ł | l | 1 | | | |
| GGMPGNFPCGMPGMGGMPC MAGMPGLNEILSDPEVLAAMC DPEVMVAFQDVQNPANMSK YQSNPKVMNLISKLSAKPGQQ 6527 36895 A 6577 2 433 GPPLNLSSPRGGILKTYGCELCI KRFLDSLRIZMHLLAHSAGAK AFVCDQCGAGPSKEDALETHR QTHTGTDMAVFCLLCGKRFQA QSSALQQHMEVHAGVRSYICSE CREFPSHTALKRHLRSHTGDH PYECEFCGSCFRDE 6528 36896 A 6578 1 687 | 1 | | | | | | |
| MAGMPGLNEILSDEVLAAMC DPEWMVARQDVAQNPANMSK YQSNPKVMNLISKLSAKFGQG | | | 1 | | | | |
| DPEVMVAFQDVAQNPANMSK YQSNPKVMNLISKLSAKFGGQ 6527 36895 A 6577 2 433 GPPILNLSSPRGIGILKTYGGELG KRFLDSLRLRMHLLAHSAGAK AFVCDQGAQFSKEDALETHR QTHTGTDMAVFCLLGGKRFQA QSIALQQHMEVHAGVRSYICSE CNRTFPSHTALKRHLRSHTGDH PYECEFCGSCFRDE | l | | l | | | | |
| YQSNPKVMNLISKLSAKFGGQ 6527 36895 A 6577 2 433 GPPLNLSSPRGGILKTYGGELCK KPRLDSLRIZMHLLAHSAGAK A A A A A A A A A A | l | | l | | | | MAGMPGLNEILSDPEVLAAMQ |
| | | l | l | | 1 | | |
| KRFLDSLRLRMHLLAHSAGAK AFVCDQCGAQFSKEDALETHR QTHTGTDMAVPCLLGGKRFQA QSIALQQHMEVHAGVRSYICSE CNRTFPSHTALKRHLRSHTGDH PYECEFCGSCFRDE | | | L | | | | |
| AFVCDQCGAQFSKEDALETHR QTHTGTTDMAYELLLGGKRFQA QSSALQQHMEVHAGVRSYICSE CNRTFPSHTALKRHLRSHTGDH PYECEFCGSCFRDE 6528 36896 A 6578 1 687 | 6527 | 36895 | Α - | 6577 | 2 | 433 | |
| QTHTGTDMAVFCLLCGKRFQA QSIALQQHMEVHAGVRSYICSE CNRTFPSHTALKRHLRSHTGDH PYECEFCGSCFRDE 6528 36896 A 6578 1 687 | | | ı | | 1 | | KRFLDSLRLRMHLLAHSAGAK |
| QSIALQQHMEVHAGVRSYICSE CRITFPSHTALKRHLRSHTGDH PYECEFCGSCFRDE 1 687 6528 1 687 | | | ı | | | | AFVCDQCGAQFSKEDALETHR |
| CNRTFPSHTALKRHLRSHTGDH PYECEFCGSCFRDE 6528 36896 A 6578 1 687 | | | 1 | 1 | I | | QTHTGTDMAVFCLLCGKRFQA |
| PYECEFCGSCFRDE | | | 1 | 1 | 1 | | QS\ALQQHMEVHAGVRSYICSE |
| 6528 36896 A 6578 I 687 | | | 1 | | | | CNRTFPSHTALKRHLRSHTGDH |
| | | | | | | | PYECEFCGSCFRDE |
| 6529 36897 A 6579 2 449 | 6528 | | | | | | |
| | 6529 | 36897 | Α | 6579 | 2 | 449 | |

| SEQ ID NO: | SEQ ID NO: of peptide | Mct hod | SEQ ID NO: | Nucleotide location of first | Nucleotide location of last | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide |
|---------------|--------------------------|------------|------------|---------------------------------|-----------------------------|---|
| NO: | sequence | | 09/540,217 | eodon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 6530 | 36898 | A | 6580 | 852 | 1084 | TDAGCYYAARQCGTAVPSRDV HIRHQGTPVPQF*TAPLRARS/E VSPARRRARMLSSSASFASANIT TSSAWSDTLQP |
| 6531 | 36899 | A | 6581 | 1 | 681 | |
| 6532 | 36900 | Α | 6582 | 1 | 483 | |
| 6533 | 36901 | А | 6583 | I | 273 | TRGPWCDSVLRGCSLEQRSFIS VRLLSYLSACRHPMEDSMDMD MSPLRPQNYLFG\SLGAGAKDE LHIVEAEAMNYEGSPIKVTLAT LKMS |
| 6534 | 36902 | A | 6584 | 1 | 678 | DKING |
| 6535 | 36903 | A | 6585 | 3 | 634 | |
| 6536 | 36904 | A | 6586 | 4 | 479 | CSAKTAIRGVSECLIHHHGIPHS TASDQGTHFTAKEVWQWAYA HGIHWSYHVLHHPEEA/GKER WNGLLKSQLQCQLGDNTLQG* GKVLQQAVYVLN*HPIYGTVSP IARIH/GSRNQG/VETELTPLTITP SDPLAKFLLPVPPTLHSAGLEIL VPEGEIR |
| 6537 | 36905 | A | 6587 | | 1539 | MVGKAKWKPLELPLPRKMVSQ KQYRILGGTAEISVTIKULKDA RVVIPSTSPFYSPIWPVQKIDGS WRMTEDYRKLNQVYTPTAAA PVPVYSLLEQINTSPGTRYAAID LTNAFSIPFIKAHQKLFAFSW QGQQYTFTVLPWGDINSPALCH NLIRRDPDCFSLPQDITLYHHID DIMLTGSREQEVADTADFLVKD KLHLAPPTTKQAQHLVGLF GFWRQHIPLLGYLLQPIYRVTQ KVASFEWSQEQKTALQQVQAA VQAVLPLQPYNPADPMVLEVS VADRDAVCSLWQAPIGGSQWR PLGFWSKALVESADNVSPFERQ LLA/CHKVGHAQQHSISKWK*Y HIDRAQADYHPWTQACLIHCQ GIPHSIASDKDAHFTTREVWQW THAHEIHWCYHVLHPEAAGL TERWNRLLKSQLQRDLGDNTL CREWNRLLKSQLQRDLGDNTL QGSGKVLQKAMYALNQHPYG TISPIARIHGSSNQGVEVAPLTIT PSDPLAKFLLCYPTTLRSAGLD VLYPEGGMTQQFH |

| SEO ID | SEO ID NO: | IALat | SEQ ID NO: | Nucleotide | Nucleatide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-------|------------|-------------------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | L | L | |
| 6538 | 36906 | Α | 6588 | I | 566 | MGRNQSRKAENSKNWSASSPP |
| | | 1 | | | | KDHSSLPAMEQSWMENDFDEF |
| | | | | | 1 | TEVGFRRSVITNFSELKEHVLTY |
| | l | l | | | | CKEAKNVEKRIYRSRNQGMEV |
| i | 1 | ı | | | | KVAPLTITPSDPLANFFASVPAT |
| | | l | | | | LHSAGLEVLVPEGGTLPLGDTT |
| 1 | 1 | l | | | i e | MIPLNWKLRLRTGYFGLLLRLS |
| 1 | | l | | | | QQAKKGAMVLA/GVVDPDYQ |
| | | | | | | NEISLLLHN*GKTHDH |
| 6539 | 36907 | Α | 6589 | 221 | 357 | |
| 6540 | 36908 | С | 6590 | 228 | 342 | |
| 6541 | 36909 | A | 659 I | 745 | 849 | |
| 6542 | 36910 | Α | 6592 | 1 | 240 | |
| 6543 | 36911 | A | 6593 | 2 | 495 | FVRLVGRGDCDPLLSVCLTTMP |
| | | | | | Į. | LYEGLGSGG\EKTAVVIDLGEA |
| | | | | l . | | FTKCGFAGETGPRCIIPSGIKRA |
| İ | | ı | | l | 1 | GMPKPVRVVQYNINTEELYSYL |
| | | l | | | | KEFIHILYFRHL\LVNPRDRRV\V |
| 1 | | | | i | | IIES\VLCPS\HFREDTHSCFFFKY |
| | | | | i | | FE\VPSVLLA\PS\HLMALLTLGI |
| | | l | | | İ | NSWHGPRL |
| 6544 | 36912 | A | 6594 | I | 579 | |
| 6545 | 36913 | A | 6595 | I | 621 | |
| 6546 | 36914 | A | 6596 | ı | 35I | |
| 6547 | 36915 | Α | 6597 | I | 447 | |
| 6548 | 36916 | Α | 6598 | 114 | 880 | |
| 6549 | 36917 | Α | 6599 | 1 | 2625 | |
| 6550 | 36918 | Α | 6600 | 1 | 1674 | |
| 655I | 36919 | Α | 6601 | 1035 | 2235 | QTHSQYHTEWAKTGSIPFENW |
| | | l | | | | HKTGIPSLTTPIQHSVGSSGQGN |
| | | l | | | | OAGEGNKGYSIRKRGSOIVPVC |
| | | | | l | i | RRHD/VYI*KTPLSQPEISLS**A |
| | | 1 | | | | TSAKS/LGYKINVQKSQAFLYT |
| | | l | | | | NNROTESQIMSELPFTIASKRIK |
| | | l | | | | YLGIOLTRDVKDLFKENYKPLL |
| | | l | | ł | | KEIKEDTNKWKNIPCSWVGRIN |
| | | 1 | | | | IVKMAILPKVIYRFNAIPIKLPM |
| | Ì | 1 | | | | PFFTELEKTTLKFIWNQKRARIT |
| | | | | | ŀ | KSILSOKNKAGGITLPDFKLYY |
| | | 1 | | | | KATVTKTAWYWYQNRDIDQW |
| | 1 | | | 1 | | NRTEPSEITPHIYNYLIFDKPEK |
| | | l | | | | NKQWGKDSLFNKWCWENWLA |
| 1 | | | | 1 | 1 | ICRKLKLDPFLTPYTKMNSRWI |
| | | | | | | KDLNVRPKTIKTLEENLGITIQD |
| | | 1 | | | | IGMGKDFMSKTPKAMATKAKI |
| | | 1 | | | | DKWDLIKLKSFCTAKETTIRVN |
| | | | | | | ROPTK |
| | J | | L | | L | NOLIV |

| SEQ ID NO: | SEQ ID NO: of peptide sequence | | SEQ ID NO: in USSN 09/540,217 | Nucleotide location of lirst codon for peptide sequence | | Amino acid sequence (X=Unknown, *=Stop coden, /=possible nucleotide deletion, \=possible nucleotide insertion) |
|---------------|--------------------------------------|---|-------------------------------------|--|------|--|
| 6552 | 36920 | Α | 6602 | 369 | 1917 | AGEGNKGYSIRKRGSQIVPVCR RHDIVYI'KTPLSQPKISLS**AT SAKS/LGYKINVQKSQTFLYTN NRQTESQIMSELPFTIASKKIKY LGIQHTRDVKDLFKENYRHL EIKEDTNK WKNIPCSWVGRINI VKMALIPKVIYRFNAIPIKLPMT FTELEKTISKFIWNQKRARITK SLSQKNKAGGITL-PDFKLYYK ATVIKTAWYLLYQNRDIDQWN RTEPSEMTPHTYNYLIFDKPEK NKQWGKDSLFNKWCWENWLA ICRKLKLDPELPTYKINSRWIK DLNVRPKTIKTLEENLGITIQDI GMGKDEMSKTPKAMATKOKID KWDLIKLKSECTAKETTIRVNR QPKKWEKIFATYSSOKGLISRIY NELKQIVKKKTNPIKKWAKD MNRHFSKEDIYAAKKHMKKCS SSLAIREMQIKTTMRYHLTPVR MAIIQKSGNNRCWRGGGEIGTI. LHCWWDCKLKQHILTHRWEL NNEITWTQEGEYHTLGTVVGW |
| 6553 | 36921 | Α | 6603 | 1 | 2781 | |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \-possible nucleotide insertion) |
| | | | | sequence | | |
| 6554 | 36922 | Α | 6604 | 1320 | 2403 | LQTILQVYSNQNSMVLVPKOR |
| | | | | | | YRSMEONRALRNNATYLOLSD |
| | | | | | | L*QT*EKQAMGKGFPI**MVLG |
| | | | i | | | KLASHM*KAETGSLPYTLYKN |
| | | | | | | QFKMD*RLKR*T*NSKKQSPSP |
| | | | | | | PPKERSSSPATEQSWTENDFDE |
| | | l | | | | LREEGFRRSNYPELREDIQTKG |
| | | İ | | | | KEEIQTTIREYYKHLYANKLEN |
| | | | | | | LEEMDKFLNTYTLPRLNQEEVE |
| | | | | | | SLNRPITGSEIVAVINSLPTKKSP |
| | | | | | | GPDGFTAEFHQRYKVELVPFLL |
| | | | i | | | KLFQSIEKEGILPNSFYEASIILIP |
| ŀ | | | | | | KPGRDTIKKENFRPISLTNIDAKI |
| | | | | | | LNKILANRIQQHIKKLIHYDQV |
| | | | | | | GFIPGMQDWFNIRKSINVIQHIN |
| | | | | | | RTKVKNHMIISIDAEKAFDKIQ |
| | | | | | | QRFMLKTLNKLAQNLLKLISNF |
| | | | | | | SKVSGYKINVQKSQAFLYTNNR |
| | | | | | | QTESQIMSELPFTIASKRIKYLGI |
| | | | | | | QLTRDVKDLFKENYKPLLKEIK |
| | | | | | | EDTNKWKNIPCSWVGRLNIVK |
| | | | | | | MAILPKVIYRFNAIPIKLPMTFF |
| | | | | | | TELEKTTVKFIWNQKRACITKSI |
| İ | | | | | | LSQKNKAGGITLPDFKLYYKST |
| | | | | | | VTKTAWYWYQNRDIDQWNRT |
| | | | | l | | EPSEIMPHIYNYLIFDKPEKNKQ |
| | | | | | | WGKDSLFNKWCWENWLAICR |
| 1 | | | | l | | KLKLDPFLTPYTKINSRWIKDL |
| | | | | | | NVRPKTIKTLEENLGITIQDIGV |
| | | | | | | DKDFMTKTPKAMATKPKIDKW |
| | | | | | | DLIKLKSFCTAKETTIRAFDELD |
| | | | | | | DVHPHEEIEACRVWQNYGTHP |
| 6555 | 36923 | Α | 6605 | 2202 | 2515 | KSLQCEHSSHIQDLPLACLGLR |
| | | | | | | KHYMVAQYL*HSHS/ASGGGSR |
| | | | | | | YDVLKISVSCSSTIDI*LAFVSLG |
| | | | | İ | | *DKRTS**TNLAESSPNFFHWV |
| | | _ | | | | WIFLASKKFCSVPAR |
| 6556 | 36924 | Α | 6606 | 1934 | 2077 | AIPFRIQA WARTSCPKHKKQWQ |
| | | | | | | QKPKLTNGI*FN*RASAQQKKL |
| L | | L_ | | | | PSE |
| 6557 | 36925 | В | 6607 | 1 | 2325 | |

| SEQ ID | SEO ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | eodon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | 1 | 09/540,217 | eodon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 6558 | 36926 | A | 6608 | 1524 | 2877 | IRKRGSQIVPVCRRHD/VFV*KT |
| 0550 | 50,20 | · · | | | | PSSQPKISLS**ATSAKS/LGYKI |
| l | | | | | | NVOKSQAFLYTNNRQTESQIMS |
| l | | ŀ | | | | ELPFTIASKRIKYLGIQLTRDVK |
| 1 | | | | | | DLFKENYKPLLKEIKEDTNKW |
| | | | | | 1 | KNIPCSWVGRINIVKMAILPKVI |
| 1 | | į. | | | | YRFNAIPIKLPMTFFTELEKTIL |
| | | | | | | KFIWNOKRARIAKSILSOKNKA |
| | | | | | 1 | GGITLPDFKLYYKATVTKTAW |
| | | | | | | YWYONRDIDOCNRTEPSEIMPH |
| | | | | | 1 | IYNYLIFDKPERNKQWGKDSLF |
| | | | | | | NKWCWENWLAICRKLKLDPFL |
| | | | | | 1 | TPYTKINSRWIKDLNVRPKTIKT |
| | | l | | | | LEENLGITIQDIGVGKDFMSKTP |
| | | l | | | | KAMATKDKIDKWDLIKLKSFC |
| l | | l | | | | TAKETTIRVNRQPTTWEKIFAT |
| | | 1 | | | ŀ | YSSDKGLISRIYNELKQIYKKKT |
| | | 1 | | | 1 | NNPIKKWAKDMNRHFSKEDIY |
| | | 1 | | | | AAKKHMKKCSSSLAIRERQIKT |
| | | 1 | | | ľ | |
| | | 1 | | | | TMRYHLTPVRMAIIKKSGNNR |
| 6559 | 36927 | - | 6609 | 1 | 2226 | DMDEIGNHHSQ |
| 6560 | 36928 | A | 6610 | 1 | 674 | MGKKONRKTGNSKTOSASPPP |
| 0300 | 30926 | l^ | 0010 | l' | 0,4 | KERSSSPATEQSWMENDFDELR |
| | | 1 | | | | EEGFRRSNYSELREDIOTKGKE |
| | | ļ | | | | VONFEKNLEECITRITNTEKCLK |
| | | 1 | | | | ELMELKTKARELREECRSLRSR |
| | | | | | | CDOLEERVSAMEDEMNEMKRE |
| | | | | | | GKFREKRIKRNEQSLQEIWDYV |
| | | 1 | | | | KRPNLRLIGVPESDVENGTKLE |
| | | | | | | NTLQDIQEN/CPQSSKAGQRSD |
| | | | | | | SGNTENATKILLEKSNSKTHNC |
| | | l | | | l | OIHOS |
| 6561 | 36929 | В | 6611 | t- | 5175 | QINQS |
| 6562 | 36930 | A | 6612 | 1666 | 2032 | LOTILOGYSNONSMVLVPKOR |
| 0302 | 150750 | 1 | 0012 | 1000 | 2002 | YRSMEQNRALRNNATYLQLSD |
| | | | | | | L*QT*EKQAMGKGFPI**MVLG |
| | | 1 | | | | KLASHM*KAETGSLPYTLYKN |
| | | 1 | i | | | QFKMD*RLKH*T*NHKNPRRKP |
| | | l | | | | RHYHSGHRHGQGLHV |
| 6563 | 36931 | A | 6613 | 1596 | 2169 | AGEGNKGYSIRKRGSQIVPVCR |
| 0303 | 20931 | l^` | 10013 | 1370 | 2107 | *HD/VYI*KTPLSOPKISLS**ATS |
| | | | l | | | AKS/LGYKINVQKSQAFLYTNN |
| | | 1 | | | | ROTESQIMSELPFTIASKRIKYL |
| | | | | i | | |
| | | 1 | l | | | GIQLTRDVKDLFKENYKPLLKE |
| | | | l | | | IKEDTNK WKNIPCS WVGRINIM |
| | | 1 | l | | | KMAILPKVIYRFNAIPIKLPMTF |
| | | | l | | | FTELEKTKVHMEPKKCPHHQG |
| | L | | | l | | NPKPKEQSWRHHTT |

| SEQ ID NO: | SEQ ID NO: of peptide sequence | Met hod | SEQ ID NO: in USSN 09/540,217 | Nucleotide location of first codon for peptide sequence | codon for last amino acid of peptide sequence | deletion, \=possible nucleotide insertion) |
|---------------|--------------------------------------|------------|-------------------------------------|--|--|---|
| 6564 | 36932 | A | 6614 | 1667 | 3103 | AGEGNKGYSIRKRGSOIVPVCR +HDVYI+KTLSOPKISLS-*ATS AKS/LGYKINVQKSQAFLYTNN KQTEKQIMSELPITASKRIKYL GIQLTRDVKDLFKENYKPLLQE IKEDTSKWKNVPCSWVGRINIV KMALIPKVIYRFNAIPIKLJPMPF FTELEKTILKFIWDQKRARIAKS ILRQKNRAGGITLPDFKLYVKA TVTKTAWYWYQNRDIDQCM TEPSEITPHIYNYLIFDKPEKN WOGKDSLFRKWCWENVLAIC RKLKLDPFLTPYTKINSRWIKD LLNIRPKTIKTLEENLGTIQDIGM KOFFMSKTPKAMATNAKIDK WDLIKLKSFRTAKETTIRVNRQ PTIKWQKIPATYSSDKGLINSRIY NELKQIYKKKTNINIKWAED MNRHFSKEDIYAAKHMKKCS SLAIREMQIKTTMKYHLTPVR MAIIKKSGNNRLTLLNNHNNPQ PLISIKEPREKELINLOV |
| 6565 | 36933 | Α | 6615 | 3134 | 3288 | |
| 6566 | 36934 | Α | 6616 | 1 | 2630 | |
| 6567 | 36935 | В | 6617 | 877 | 7936 | |
| 6568 | 36936 | Α | 6618 | 2 | 1589 | |
| 6569 | 36937 | Α | 6619 | 1 | 240 | |
| 6570 | 36938 | Α | 6620 | 200 | 486 | |
| 6571 | 36939 | Α | 6621 | 1 | 558 | |
| 6572 | 36940 | Α | 6622 | 1 | 3885 | |

| SEQ ID | SEO ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 6573 | 36941 | Ā | 6623 | 1 | 2302 | KLPVTNRAAHGLCASLGPDFM |
| | | | | l | | TFKVPSSWRHSDSICREWFTLA |
| | 1 | | | | | GAPSRDVLLVSAIITVSLSVTVV |
| | | i | | | | LCGLCHWCQRKLGKRYKNSLE |
| | | | | ŀ | | TVGTPDSGRGRSEKKAIKVSRP |
| | 1 | | | | ļ | CPPPAKASATHPTCKSPRSQEK |
| | | | | | | VESPGDLDRDFWNNNESTVQQ |
| | | | | | | KWSSYPPKEFILNISPYAPYGDF |
| | | | | | | RLSLNGTLLSGAKVAAAAGLA |
| | | | | | | VEREGRLGEKPAPVPPPGEDAL |
| | | | | | | RSGGAAPSEPGSGGKAGRGRW |
| | | | | 1 | | RTVQSHLAAGKLNLSNFEDSTL |
| | | | | | l | STATTLESIPSSTGEPKCORPRT |
| | | | | | | LMRQQSLQQPLSQHQRGRQPS |
| | | | | 1 | | QPTTSQSLGQLQAHMASAPGP |
| | | | | | | NPRAYGRGQARQGTSAGSKYR |
| | | | | | | AAGGRSRSNPGSWDHVVGQIR |
| | | | | | | NRGLDMKSFLTTSSRAAK WNF |
| | | | | | | TNSETVPALDLDSAVVLIPWISS |
| | İ | | | | | KEDTGDSHYGRVAIYHKGLSFS |
| | | | | | | SDGLVYPGAKGREGRMVVLSL |
| | | | | | | VLGLSEQDDFANIPDLQNPGTQ |
| | | | | l | | QNQNAQGDKRLPAGGKAVNT |
| | | | | | - | APVPGOTPHDESDRRTEPRSSV |
| | | | | | | SDLVNSLTSEMLMEDWPPAVF |
| | | | | 1 | l | SSGWAIATAHPASLHSPLIGYSF |
| | ļ | | | | | LAARGGLLLFEADFCWCKRSG |
| | İ | | | | | STFPDCDGVANLAATEMALSO |
| | | 1 | | | | LRFSKETAMRESLVMLSPGSEE |
| | | l | | | | DEAHEGCSRENLGRIQFSVGYN |
| | | l | | | | FQESTLTLKIMKAQELPAKDFS |
| | | | | | | GTSDPFVKIYLLPDKKHKLKTK |
| 6574 | 36942 | Α | 6624 | 1 | 576 | |
| 6575 | 36943 | Α | 6625 | 1 | 155 | |
| 6576 | 36944 | Α | 6626 | 4746 | 5258 | DAGAQPSLPRYLIYHQPSRFFRI |
| | | | | | | TSTVTPFSKPISSLLWLV*/GLHC |
| | | | | | | DILL/RLLQS*RC*CRSHPEYHSO |
| | | | | | | PPGRWQGPSPAPQKCSRTTSRS |
| | | l | | | | RSSR*HPPPPRPGGSAPSSPASYS |
| | | ĺ | | 1 | | WTPPRTVPGSWARRWRRHLSR |
| | | | l | l | | PSWATOPSWTATLWSOPLWRL |
| | | | | l | | KWEDCLSPGRSRLQ |
| 6577 | 36945 | A | 6627 | 1 | 588 | |

| SEQ ID | SEQ ID NO: | Mct | SEQ ID NO: | Nucleotide | | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------------------|---------------------|--|
| NO: | of peptide | hođ | in USSN | location of first | | *=Stop codon, /=possible nuclcotide |
| | sequence | | 09/540,217 | eodon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 6578 | 36946 | Α | 6628 | 444 | 1056 | GPLLREPHQLCHFPVAGFVLDA |
| | | | l | | | GLPEAAAAPHDRGPELAGPQA |
| | | 1 | | | | AGQHPAQVAHQPRAAAQQRQ |
| | | 1 | | | | GRRAREEAGAQAQEEPRGPQE |
| | | | | | | RRRRLAEGLRRQCGHPAGRDG |
| | | | | | | RGGYRRAAQGPARGGRTPEWQ |
| | | l | | | | QSGGARRTPSVGHPRRARAD\W |
| | ŀ | 1 | | | | CLTGANDALSCSSPTCGKFLKT |
| | | | l | | | VSKVPVCRRGLAVNRKEAEGR |
| | 1 | 1 | | | ŀ | SSESPTSSATFQSPALSWMLVS |
| | | 1 | | | | QRLLLPHMIGAQSSPGPKRPGN |
| | | 1 | | | | TLRKWLTSPVRRLSSGKADGH |
| | | 1 | | | | VKKLAHKHKKSREVRKSADAG |
| | | l | | | | SQKDSDDSAATPQDETVEEDTV |
| | | 1 | | | | AQPRGRREGAGRQSGSRAAGP |
| | | 1 | | | | GGRRASAIRGGHARTDVGKRN |
| | | | | | | GTRTRKELMPLHGKRKDAAEH |
| | | | | | | DEPTSASRPAGERPELTLAAVQ |
| | | | | | | TEYNCSFPS |
| 6579 | 36947 | Α | 6629 | 128 | 1103 | |
| 6580 | 36948 | A | 6630 | 1 | 602 | |
| 6581 | 36949 | Α | 6631 | 3 | 1618 | |
| 6582 | 36950 | Α | 6632 | 1 | 602 | |
| 6583 | 36951 | Α | 6633 | 3 | 1618 | |
| 6584 | 36952 | Α | 6634 | 1 | 912 | |
| 6585 | 36953 | Α | 6635 | 195 | 396 | VLPLHRQI**LLH*SKKHNHYK |
| | | 1 | | | | GKQQDLR/CSSTVPRRPQGILPII |
| l | | | | | | SFSNVPVGSRRLKAPLVFIGPG |

| SEO ID | SEO ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|---------|------------|-------------------|-----------------------------|--|
| NO: | of peptide | | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 6586 | 36954 | A | 6636 | 2 | 1813 | FNTPLSTLDRSSRQKVNKDIQD |
| | | l | | l | | VISALHEAGLIDIYRTLHPKSTE |
| | ļ. | 1 | | | | YTFFSAPHHTYYKIDHIVGSKA |
| | | l | | | | LLSKCKRTEITTNCLSDDRAIKL |
| | 1 | 1 | | | | ELRIKKLTONYTTTWKLNNLLI |
| | ľ | | | | 1 | SDYWVNNEMKAEIKMFFETNE |
| | ŀ | 1 | | | | NKDTMYONLWDTFKAVCRGK |
| | į. | 1 | | | | FIAVNAYKRKQERSKIHTLTSO |
| | | l | | | | LKEPEKOEOTHSKASRROEITK |
| | l . | | | | | RAELKEIDTOKTLOKISVSRSW |
| l | | 1 | | | | FSERINKIDRLIARLMKKKREK |
| | 1 | | | | | NOIDAIKNDKGDITIDPTEMOTT |
| | | 1 | | | | IREYYKNLYANKLENLEEMDK |
| | | 1 | | | | FLDTYILPRLNQEEVELPNRPIT |
| | | | | | | GSENEAUNSLP/TKKSPGPDEFT |
| | | | | | | AKFYORYKG\LARAIROEKERE |
| | | | | | | DTOLGKEEVKLLLFAEDMIVYL |
| | | l | | | | ENPIVSAONLLKLINNFSKVSGY |
| | 1 | | | | | KINVOKSOAFLHTNNROTESOI |
| | | | | l | | MSECPLTIASKRIKYLGIQLTRD |
| | , | | | l | | VKDLFKENYKPLLNKIKEDT\N |
| | | | | | | KWKNIPRSWLGRNNIVKMTILP |
| | ŀ | 1 | | | | KVI/YKKTTLNFIWNOERARIAK |
| | | | | | | TILSKKNKAGGITLPDFKLYYK |
| | 1 | | | | i | ATVTKTARYWTLTIKKGSVWP |
| | ŀ | | | i | i | SLKSEKRGHRTRPLWKLCHND |
| | | | ļ | | 1 | VOGELLKTIOFLFGSPLGHSSLD |
| 6587 | 36955 | A | 6637 | 1 | 2988 | MPPHSEQPHSPSTRQKRKVPLF |
| | | 1 | | | | VROCPSFVIQAPKAKMDTFDGF |
| | | | | | | KKOFTRFLFLFSMDOLGOGRFS |
| | | 1 | | | | MOTLSFALAVYRKDSPLVACO |
| | 1 | l | | | | VOALGNLEPSSVEAHVSSHGIA |
| | | | | | | DRKGWHVSLFSIOPGDCFPKAL |
| | | 1 | | | | VEDSPRDRARROOSSKEEGWC |
| | ì | | | | | RDRRRLKFHSKKGAAAIVVKS |
| | 1 | 1 | | I | | KKYESPSFGVCFESLLNPPRLTS |
| | 1 | 1 | | | | RREKTISSSKRCROCHAEETTV |
| | | 1 | | | I | VFWAKESQTGEQTGRGAGQRR |
| | | | | | | MGMIICKACSMLPAE |
| 6588 | 36956 | В | 6638 | 362 | 1463 | |
| 6589 | 36957 | A | 6639 | 1 | 1061 | |
| 6590 | 36958 | A | 6640 | 1 | 1581 | |
| 0550 | 30738 | <u></u> | 0040 | l' | 11361 | |

| SEQ ID NO: | SEQ ID NO: of peptide sequence | Met | SEQ ID NO: in USSN 09/540,217 | Nucleotide location of first codon for peptide sequence | Nucleotide location of last codon for last amino acid of peptide sequence | Amino acid sequence (X=Unknown, ^=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
|---------------|--------------------------------------|-----|-------------------------------------|--|---|---|
| 6591 | 36959 | A | 6641 | 46 | 862 | AAFPARTLEFLSRPLAPTACAA FRPEFWRLNMKLPARVFTLGS RLPCGLAPRRFSYGTKILYQN TEALQSKFSPLQKAMLPPNSF QGKVAFITGGGTGLGKGMTTL LSSLGAQCVIASRKMDVLKAT AEQISSQTGNKVHAIQCNVKYP DMVQNTVSELIKVQGPPSTVIT N*STERSSISSLLPTIYA*DWFRF CSTQVLLPKQVWKPMSKSLAA |
| 6592 | 36960 | A | 6642 | 1 | 2902 | EWGKIWNAIQC WYKGSLQQEELTILNIYAPNTE APRFIKQVLRDLQRDLDSHTLI MGDFNTPLSTLDRSTRQKINKD TQELNSALYQADLIDIYGTH KSTREYTFPSAPHHTYSQNWTT IVGSKALLSEHKRTEITNYLSD WISAMKLELRIKKLTQNIRSATW KLNNLLLNDYWYHNDMKAEI KMFEFTKENKUTTYQNLWT FKAVCRGKFIAKINAHNRKQE RSKIDTLTSQUKELEKKEQTYL KASRROETT |
| 6593 | 36961 | Α | 6643 | 1 | 5127 | |
| 6594 | 36962 | В | 6644 | 1 | 3570 | |
| 6595 | 36963 | Α | 6645 | 1 | 3663 | |
| 6596 | 36964 | В | 6646 | 143 | 3122 | |
| 6597 | 36965 | Α | 6647 | ī | 3235 | |
| 6598 | 36966 | Α | 6648 | 1 | 3249 | |
| 6599 | 36967 | A | 6649 | 1 | 3297 | |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nuelcotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop eudon, /=possible nucleotide |
| | sequence | 1 | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 6600 | 36968 | A | 6650 | n | 2563 | MKAEIKMFFETNENKDTTNON |
| | 150500 | ľ` | 1 | 1 | | LWDAFKAEEVESLNRPITGAEI |
| | | | | | | GAIINSLPTKKSPGPDGFTAEFY |
| | | 1 | | | | ORYKEELVPFLLKLFQSIEKEEI |
| | | | | | | LPNSFYEASIILIPKPGRDTTKKE |
| | | | | | | NFRPISLMNIDAKILNKILANRI |
| | | | | | | OOHIKKLIHHDOVGFFPGMOG |
| | | | | | | WENIRKSINVIOHINRAKDKNH |
| | | | | | | MIISIDAEKAFDKIQQPFMLKTL |
| | | | | | | NKLGIDGTYFKIIRAIYDKPTAN |
| | | | | ŀ | | IILNGOKLEAFPLKTGTROGCPL |
| | | | | | | SPLLFNILLEVLARAIROEKEIK |
| | | | | ł | | GIQLGKEEVKLSLFADDMIVYL |
| | Ì | | | | | ENPIVSAONLLKLISNFSKVSGY |
| ĺ | | | | | | KINVQKSQAFLYTSNRQTESQI |
| | | | | | İ | MSELPFTIASKRIKYLGIQLTRD |
| | | | | 1 | | VKDLFKENYKPLLKEIKEDTNK |
| | | | | 1 | | WKNIPCSWVGRINIVKMAILPK |
| | | | | | | VIYRFNAIPIKLPMTFFTELEKTT |
| | | | | | | LKFIWNQKRAHITKSILSQKNK |
| | | | | | | AGGITLPDFKLYYKATVTKTA |
| | | | | İ | | WYCYONRDIDOWNRTEPSEITP |
| | | | | | | HTYNYLIFDKPEKNKOWGKDS |
| | 1 | | | Į. | | LFNKWCWENWLAIWRKLKLD |
| | | | | | | PFLTPYTKINSRWIKDLNVRPKT |
| l | | | | | | IKTLEENLGITIQDIGMGKDFMS |
| | | | | ĺ | | RTPKAMATKAKIDKWDLIKLK |
| | | | | ł | | SFCTAKETTIRVNRQPTTWEKIF |
| | | | | | | ATYSSDKGLISRIYNELKQIYKK |
| . | | | | I | | KTNNPIKKWEKDMNRHFSKED |
| l | | | | | | IYAAKKHMKKCSSSLAIREMQI |
| | | | | | | KTTMRYHLTPVRMAIIKKSGNN |
| 660I | 36969 | Α | 6651 | 1 | 3402 | |
| 6602 | 36970 | Α | 6652 | I | 3288 | |
| 6603 | 3697I | Α | 6653 | I | 3168 | |
| 6604 | 36972 | Α | 6654 | 1 | 3516 | |
| 6605 | 36973 | Α | 6655 | 1 | 3693 | |

| SEQ ID | SEO ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | 1 | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 6606 | 36974 | IA | 6656 | 11577 | 3354 | TEPKTKTT*LSO*MOKRPLTKF |
| | | 1 | | | | NNLSC*KLSIN/IVLEVLARAIRC |
| 1 | | | | | | EKEIKGIOLGKEEVKLSLFADD |
| | | 1 | | 1 | | MIVYLENPIVSAQNLLKLISNFS |
| | | | | 1 | 1 | KVSGYKINVQKSQAFLYTNNR |
| | | 1 | | 1 | | QTESQIMSELPFTIASKRIKYLGI |
| i | | 1 | | 1 | | QLTRDVKDLFKENYKPLLKEIK |
| | | 1 | | 1 | ł | EDTNKWKNIPCSWVGRINIVK |
| | | 1 | | 1 | | MAILPKVIYRFNAIPIKLPMTFF |
| | | 1 | | l | | TELGKTALKFIWNQKRARITKS |
| 1 | | 1 | | | | LSOKNKAGGITLPDFQLYCKAT |
| | ł | | | | | VTKTAWFPSGDVGLEADFSPSF |
| | | 1 | | | | TLKTQFFSCLAEFAAASCFFQR |
| | | - | | | | MNGFGMAMTTTYSTGAAESPL |
| | | 1 | | | | PSCSIDQGDDTKLHRARSPGRT |
| | | 1 | | | | FPAAAGIPAAAAPDGPPLSLLH |
| | | 1 | | | | KLWFPVELGGRALPRAEESHGI |
| | ļ | 1 | | | | VAALGVMVVAQGGKNQGEEA |
| | | l | | | | RSTPWLRPTSHLPPCSSSSAWW |
| | | 1 | | | | TEQTDAHPLLFLLCLGIYLLNA |
| | | 1 | | | | LSNLSMVALVRSDGALRSPMY |
| | | į . | | | | YFLGHLSLVDVCFTTVTVPRLL |
| | | 1 | | | | AGLLHPGQAISFQACFAEMYFF |
| | | | | | | VALGITESYLPAAMSYDRATAA |
| | 1 | ı | | i | | CRPLRYGALVTPWALRLAARY |
| | | | | | | DRLASVVYAVITPTLNPFINSLR |
| | | | | | | NKEVKGALKRGLRWRAAPQE |
| 6607 | 36975 | Α | 6657 | 1 | 3514 | MELKTKARELREECRSLRSRCD |
| | | | | | | QLEERVSAMEDEMNEMKREG |
| | | | | | | KFREKRIKRNEQSLQEIWDYVK |
| | | | | | 1 | RPNLRLIGVPESDVENGTKLEN |
| | | | | ŀ | | TLQDIIQENFPNLARQANIQIQEI |
| | | | | | İ | QRTPQRYSLRRATPRHIIVRFTK |
| | 1 | | | | | VEMKEKMLRAAREKDRSTRQK |
| | l | | | | ŀ | VNKDTQELNSALHQADLIDIYR |
| | 1 | | | | | TLHPKSTEYTFFSAPHHTYSKT |
| | | | | | | DHIVGSKALLSKCKRTEIITNYL |
| | | | i | 1 | | SDHSAIKLELRIKNLTKSRSTTW |
| | | | | | | KLNNLLLNDYW |
| 6608 | 36976 | Α | 6658 | 3 | 3316 | |
| 6609 | 36977 | Α | 6659 | 1 | 4794 | |
| 6610 | 36978 | Α | 6660 | 1 | 3570 | |
| 6611 | 36979 | В | 6661 | 1 | 3384 | |
| 6612 | 36980 | Α | 6662 | 1 | 3429 | |
| 6613 | 36981 | Α | 6663 | 1 | 3780 | |
| 6614 | 36982 | Α | 6664 | 1 | 3894 | |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------------------|---------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 6615 | 36983 | A | 6665 | 1 | 3335 | MVKGSIQQEELTILNIYAPNTG |
| | | | | | | APRFIKOVLSDLQRDLDSHTLI |
| | | | | | | MGDFNTPLSTLDRSTROKVNK |
| | | | | | | DTOELNSALHQADLIDIYRTLH |
| | | | | | | PKSTEYTFFSAPHHTYSKIDHIV |
| | | | | | | GSKALLSKCKRTEIITNYLSDHS |
| | | | | | | AIKLELRIKNLTQSRSTTWKLN |
| | | | | | | NLLLNDYWVHNEMKAEIKMFF |
| | | | | | | ETNENKDTTYONLWDAFKAVO |
| | | | | | | RGKFIALNVYKRKOERSKIDTL |
| | | | | | | TSOLKELEKOEOTHSKASRROE |
| i | | | | | | ITKIRAELKEIETO |
| 6616 | 36984 | В | 6666 | 1 | 3145 | |
| 6617 | 36985 | A | 6667 | 1 | 4398 | |
| 6618 | 36986 | Α | 6668 | 523 | 3852 | |
| 6619 | 36987 | Α | 6669 | 1 | 3934 | MGKKQNRKTGNSKTQSASPPP |
| | | l | | | | KERSSSPATEOSWMENDFDELR |
| | | | | | | EEGFRRSNYSELWEDIQTKGKE |
| | | 1 | | | | VENFEKNLEECITRITNTEKCLK |
| l | | l | | | | ELMELKTKARELHEECRSLRSR |
| | | l | | | | CDOLEERVSAMEDEMNEMKRE |
| | | l | | 1 | | GKFREKRIKRNEQSLQEIWDYV |
| l | | l | | | | KRPNLRLIGVPESDVENGTKLE |
| | | 1 | | - | | NTLODIIOENFPNLAROANVOI |
| | | 1 | | | | QEIQRMPQRYSSRRATPRHIIVR |
| | | 1 | | | | FTKVEMKEKMLRAAROKAPH |
| | | l | | - | | HTYSKIDHIVGSKAL |
| 6620 | 36988 | В | 6670 | 1 | 5215 | |
| 6621 | 36989 | Α | 6671 | 1 | 7171 | |
| 6622 | 36990 | Α | 6672 | 3 | 493 | |
| 6623 | 36991 | Α | 6673 | 1 | 729 | |
| 6624 | 36992 | Α | 6674 | 3 | 800 | |
| 6625 | 36993 | Α | 6675 | 1 | 327 | |
| 6626 | 36994 | Α | 6676 | 2 | 462 | KSSWLEEDDDPVVARVNRRMQ |
| | | | | | | HITGLTVKTAELLQVANYGVG |
| 1 | 1 | l | | | | GQYEPHFDFSRRPFDSGLKTEG |
| l | 1 | | 1 | 1 | | NRLATFLNYMSDVEAGGAT\VF |
| | 1 | | | I | | PDLGAAIWPKKGTAVFWYNLL |
| l | | | l | | | RTGEGDYR\TRHAACPVLVGCK |
| | | | | 1 | | WVSNKW\FHES\GQEFLRPCGST |
| l | | 1 | 1 | 1 | i | EVD |

| SEQ ID | ISEO ID NO: | Met | SEQ ID NO: | Nucleatide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|-------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop endon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 6627 | 36995 | A | 6677 | 3 | 717 | RHRLRNRLKDVGGEAFYPLLE |
| | | | | | | DDQSNLPHSNSNNELSAAATLP |
| | | l | | | | LIIREKDTEYQLNRIILFDRLLKA |
| | | | | | | YPYKKNOIWREARVDIPPLIRG |
| | | | | | | LTWAALLGVEGAIHAKYDAID |
| | | | | | | KDTPIPTDRT/QLKWDIPRCHSV |
| | | | | | | R*TVIHAPEGHAKFRRVLK\AW |
| | | | | | | VVSHPDLVYWQGLDSLCAPFL |
| | | | į | | | YLNFNNEALVYACMSAFIPKYL |
| | | | | | | YNFFLKDNSHVIQEYLTVFSQM |
| | | ł | | | | IAFHDPELSNHLNEIGFIPD |
| 6628 | 36996 | A | 6678 | 1 | 508 | IAT TIDI EESITIETEIGI II D |
| 6629 | 36997 | Α | 6679 | I | 888 | |
| 6630 | 36998 | Α | 6680 | 2 | 584 | |
| 6631 | 36999 | Α | 6681 | 2 | 152 | QVAKGMDALLQHLEDCGYR/S |
| | | 1 | | l | | SKKKAQICRQQVTKWGDGSAL |
| | | | | ŀ | | MGTSTTASL |
| 6632 | 37000 | Α | 6682 | 733 | 894 | |
| 6633 | 37001 | В | 6683 | 1 | 1626 | |
| 6634 | 37002 | Α | 6684 | I | 1971 | MAQVWANDNPPGLAVNQAPV |
| | | | | | | LIDVKPGAQPIRQKQYPVPREA |
| l | İ | | | | | LKGIQPGTKDYQPVQDLRLVN |
| | | | | l | - | QATVTLHPTVPNPYTLLGLLLA |
| | | 1 | | | | EDSWFTCLDLKDAFFSIRLAPES |
| | | | | | | QKLFAFQWEDPQSDLGCILLLY |
| 1 | | | | | | VDDLLLGHSTAVECAKGMDVL |
| | | l | | | | LQHLEDCRYKMSKKKAHICRQ |
| 1 | | [| | | | QVRYLGFTIRKGERS\WEREKM |
| | | 1 | | | | AVGVLTQTVGPWPRPVAYLSK |
| | | | | | | QLD/EVSKGWPLCLRTLAATAL |
| | | | | | | LAQEADKLTLGQNLNIKAPHA |
| | | | | | | VVTLMTTEGHHWLTNARLTKY |
| | | | | | | QSLPCENPHITIEVCNTLNPTTL |
| 1 | | | | | | LPVSESPGEHNCVEVLDSVYSS |
| | | 1 | | | | RPDLRDQPWASSVDWELYMD |
| | 1 | 1 | | | | GSSFINSQGERCAGYAVVTLDA |
| | | | 1 | | | VIKAKLWLOGTSAOKAELIALT |
| | 1 | l | | | | RAVELSEGQESLEELLGRYFYV |
| | 1 | | | | | SHLPAFAKAVAQLCITCROHNA |
| | | 1 | | | | ROSPTVSPHIOAYGAAPFEDLO |
| | 1 | | | I | 1 | VDFTEMPKCGGNKYLLVLTCT |
| | i i | | | l | İ | YSGWVEAYPTRTEKPYKKGKN |
| | | | | | | DPSCTKGQCNPLELVITNPLNP |
| | 1 | | | 1 | | HWKKGERVTLGIDRARLDPRV |
| | | | | | | NILVRGGEVYERSPEPVFOTFY |
| | | | | | | DELNVPVPEIPGKTRNLFLOLA |
| | 1 | | | l | | ECVAOPLNVTSCYVCGGTVTG |
| | 1 | 1 | 1 | 1 | | YOWPWKARELYPVDPVPDEFL |
| | | | | | | AQKNYPDNFWVLKPSITGQYCI |
| 6635 | 37003 | A | 6685 | 1 | 1461 | , |
| 6636 | 37004 | A | 6686 | î | 1005 | |
| سنتنب | 1 | | | | | |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | 1 | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 6637 | 37005 | Α | 6687 | 1 | 174 | |
| 6638 | 37006 | Α | 6688 | 519 | 588 | |
| 6639 | 37007 | Α | 6689 | 2 | 4527 | GRAGLGWSSGGRGSRACSEGP |
| | | | | | | AEARGREGDKGSAALSPPLPLT |
| | | 1 | | | | LGEEMAAERGARRLLSTPSFWL |
| | | 1 | | | | YCLLLLGRRAPGAAAARSGSAF |
| | | 1 | | | | QSPGASIRTFTPFYFLVEPVDTL |
| | | 1 | | | | SVRGSSVILNCSAYSEPSPKIEW |
| | | 1 | | | | KKDGTFLNLVSDDRRQLLPDGS |
| | | 1 | | | | LFISNVVHSKHNKPDEGYYOCV |
| | | 1 | | | | ATVESLGTIISRTAKLIVAGLPR |
| | | 1 | | | | FTSQPEPSSVYAGNNAILNCEV |
| | | 1 | | | | NADLVPFVRWEQNRQPLLLDD |
| l | | 1 | | | | RVIKLPSGMLVI |
| 6640 | 37008 | A | 6690 | 1 | 879 | |
| 6641 | 37009 | Α | 6691 | 407 | 594 | |
| 6642 | 37010 | A | 6692 | 1 | 3621 | |
| 6643 | 37011 | В | 6693 | 1 | 609 | |
| 6644 | 37012 | В | 6694 | 1335 | 1599 | |
| 6645 | 37013 | Α | 6695 | i i | 354 | |
| 6646 | 37014 | Ä | 6696 | 181 | 683 | SRYFILLRKPTFPAMALLPVLFL |
| | | | | | | VTVLLPSLPAEGKDPAFTALLT |
| | | ı | | | | TOLOVOREIVNKHNELRKAVSF |
| | | 1 | | | | PASNMLKMEWSREVTTNAOR |
| | | 1 | | | | WANK/CTLOHSDPEDRKTSTRC |
| | | ļ | | | | GENLYMSSDPTSWSSAIQSWY |
| | | 1 | | | | DEILDFVYGVGPKS/PQYCPAG |
| | | 1 | | | | NNMNRKNTPYOOGTPCPG |
| 6647 | 37015 | A | 6697 | 199 | 969 | |
| 6648 | 37016 | Α | 6698 | 1 | 564 | |
| 6649 | 37017 | A | 6699 | 153 | 427 | |
| 6650 | 37018 | Α | 6700 | 1 | 978 | |
| 6651 | 37019 | Α | 6701 | 3 | 419 | |
| 6652 | 37020 | Α | 6702 | 9 | 255 | VRAPAQGPDLAGGRRRCGSGA |
| | | 1 | | | | SCTPSPRGPASWSRSAAQVPRS |
| 1 | | 1 | | | | SRWRAGSASS*N/GRQPAPPTSQ |
| | | 1 | | | | PPRAQPFAQPPGPWPLS |
| 6653 | 37021 | В | 6703 | 96 | 283 | |
| 6654 | 37022 | Α | 6704 | 172 | 365 | PTYHLYPCHFWYQHRTRRIPRK |
| | | 1 | 1 | | | SERLFPTPPPQLSWKGTWDY*I |
| | | 1 | | | | CLLCCNDSEGRDFLVLRVLK |
| 6655 | 37023 | Α | 6705 | 3 | 1171 | |
| 6656 | 37024 | Α | 6706 | 2 | 740 | |
| 6657 | 37025 | A | 6707 | 256 | 461 | |
| 6658 | 37026 | Α | 6708 | 1 | 414 | |
| 6659 | 37027 | Α | 6709 | 1330 | 1386 | YIDSILPK*NHDTLQSYCRYM\H |
| | | 1 | | | 1 | SRQRAAS*PLSTGKLQQCLGLD |
| | | 1 | 1 | | 1 | LVLC |
| | | | | | | |

| | SEO ID | SEO ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--|--------|------------|---------|------------|-------------------|-----------------------------|--|
| | NO: | of peptide | hod | | location of first | | |
| | | sequence | | 09/540,217 | | of peptide sequence | deletion, \=possible nucleotide insertion) |
| NDMEDWYKSIRRVIGOLSG IFGQKLEDTVRYEKRYGNRL MI.VEQCVDFIRQRGLKEEG LPGQANLVKIELQDAFDCGE SFDSNTDVHITVASLLKLYLR EPGVIPYAKYEDFLSCAKLLS EEAGVKELAKQVKSLPVVN | | | | | sequence | | |
| NDMEDWYKSIRRVIGOLSG IFGQKLEDTVRYEKRYGNRL MI.VEQCVDFIRQRGLKEEG LPGQANLVKIELQDAFDCGE SFDSNTDVHITVASLLKLYLR EPGVIPYAKYEDFLSCAKLLS EEAGVKELAKQVKSLPVVN | 6660 | 27029 | Ι. | 6710 | 207 | 11173 | I I I I I I I I I I I I I I I I I I I |
| | 0000 | 37028 | l^ | 0,10 | 207 | 11173 | |
| MI.VEQCVDFIRQRGLEEGI | | | | | | | |
| LPGQANLVKIELQDAFPCCE | | | 1 | | | | |
| SFDSNTDVHTVASILKLYLR PEPVIPYAKYEDFLSCAKILS EEAGVKELAKQVKSLPVNN LLXYICRFLDEVQSYSGVNK VQNLATVFGPNILRPKVEDP MEGTVVVQQLMSVMISKHD FPKDAELQSKPQDGVSNNNE KKATMGQLQNKENNNTKDS RQCSWDKSESPTEKQHEQW HSSIRQQNQQPKEQWSQAI 173 881 1844 1851 1844 1851 185 | | | 1 | | | | |
| PEPVIPYAKYEDELSCAKLLS EEAGVKELAKQVKSLPVVN | | | | | | | |
| EEAGVRELAKQVKSLPVNN LIKYICRIDEVQSYSGVNK VQNLATVFGPNILRPKVEDP MEGTVVVQQLMSVMISKHE FPKDAELQSKQDGVSNNS KKATMGQLQNKENNTKDS RQCSWDKSESPTEKQHEQW HSSIRQQNQQPKEQWSQAI 6661 37029 A 6711 173 881 SSIRQQNQQPKEQWSQAI 6662 37030 A 6712 1605 1844 SSIRQQNQQPKEQWSQAI 6663 37031 B 6713 123 699 SSIRQQNQQPKEQWSQAI 6665 37033 A 6714 1 462 462 4665 37033 A 6715 1 2607 SSIRQQNQQPKEQWSQAI 6665 37034 A 6716 1 918 SSIRQQNQQPKEQWSQAI 6667 37035 A 6718 1 687 SSIRQQNQQPKEQWSQAI 6668 37036 A 6718 1 549 SSIRQQNQQPKEQWSQAI 6670 37038 A 6719 1 258 SSIRQQNQQPKEQWSQAI 6670 37038 A 6720 90 1621 HGLDLRTMNRSRQVTCVAW RCGVAKETPRKVELSKGGVI LIAEAEEKLQEGGGSDEEK SPLEEGINQSARTQARPIREPI DGDPEDIDRTLDDDELAEVD KYDEEGIPDERTLGESLLGK VYGSNDQDPYVTI.KDTEQY EDFILIPS/DBLIVCGRAEQOG NLEVHVYNQEEDSFYVHED SAYPLSVEWLNFDFSFDSTG YIAVGNMTPUEVWDLDIVD EPVFTLGSKLSKKKKKKGK SAEGHTDAVLDLSWKLIRR LASASADNTVILWDMSLGR ASLAVHTDKVQTLQFHPEA LISGSYDKSVALYDCRSPEEDE RMWRFSGQJERVTWMHSPE FLASTDDGFVYNLDARSDKP TLNAHNDEISGLDLSSQIKCG VTASADKYVKIWDILGBRPS HSRDMKMGVIFCSSCCPUL YAFGGQKEGLRVWDISTVSS NEAFGRERIVLGSARNSIS FGSRSSDTPMES FGSRSSDTPMES | | | | | ŀ | | |
| LILKYICRFLDEVQSYSGYNK VQNLATVFGPNILRPK VEDPI MEGTVVVQQLMSVMISKHD FPKDAELQSKPQDGVSNNNIK KKATMGQLQNKENNTKSD RQCSWDKSESPTEKQHEQW HSSIRQQNQQPKEQWSQAI 6661 37029 A 6712 1605 1844 6663 37031 B 6713 123 699 | | | | | | | |
| WONLATYGOPNILERY VEDPR MEGTVVVQLMSVMISKHD | | | | | | | |
| MEGTVVQQLMSVMISKHD | | | l | | | | |
| FPKDAELQSKPQGGVSNNNK KKATMGQLQNKENNTKD6 | | | | | | | |
| RKATMGQLQNKENNTKDE RQCSWDKSESPITEKQHEQW HSSIRQQNQQPKEQWSQA1 | | | 1 | | | | |
| RQCSWDKSESPTEKQHEQW HSSIRQQNQQPKEQWSQAI | | | 1 | | | | |
| HSSIRQQNQQPKEQWSQAI | | | 1 | | | | |
| 1661 37029 A 6711 173 881 | 1 | - | l | | | | |
| 100 | 6661 | 27020 | <u></u> | 6711 | 172 | 001 | HSSIKQQIQQFKEQWSQAI |
| 6654 37031 B 6713 123 669 | | | | | | | |
| 6564 37032 A 6714 1 462 | | | | | | | |
| 1 | | | - | | | | |
| 6666 37034 A 6716 I 918 | | | | | | | |
| 5667 37035 A 6717 1 549 | | | | | | | |
| 6668 37036 | | | _ | | | | |
| 100 | | | | | | | |
| 6670 37038 A 6720 90 1621 HOLDLERTMINESROYTUVAW RCGVAKETPIKVELSKGGVI LIAEAEEKLQEEGGGSDEEK: SPLEEGIMQSARTQARPIREPI DGDPEDIVBRITLDDELAEVD KYDEEGDPDAETLGIESLLGI VYGSNDQDPYVTLKDTEQYI EDFLIKPSDNLIVCGRAEQDG NLEVHVYNQEEDSFYVHHDI SAYPLSVEWLINDFDSFDDSTG YIAVGNMTPVIEVWDLDIVD EPPFTLGSKLSKKKKKKGKK SAEGHTDAVLDLSWYKLIRS LASASADNTVILWDMSLGKF ASLAVHTDKVQTLQFHPFEA LISGSYDKSVALVDCRSPDES RMWRFSGQIERTVTWHFSPG FLASTDDGFVYNLDARSDKF TLNAINDEISGLDLSSQIKGG VTASADKYVKIWDILGDRPS HSRDMKMGVIFCSSCCPDLF YAFGGGKEGLRVWDISTVSS NEAFGRERILVLGSARNSSIS FGSRSSDTPMES | | | | | 1 | 258 | |
| LIAEAEEKLQEEGGSDEEK SPLEEGMQSARTQARPREPI DGDPEDDRTL.DDELAEVD KYDEEGDPDAETLGESLLGI VYGSNDQDPYVTI.KDTEQYI EDFLIKPSDNLIVCGRAEQDC NLEVHVYNQEEDSFYVHHDI SAYPLSVEWLNFDPSPDDST YIAVGNMTPVIEVWDLDIVD EPVFTLGSKLSKKKKKKGKK SAEGHTDAVLDLSWNKLIRN LASASADNTVILWDMSLGKE ASLAVHTDKVQTLQFHPFEA LISGSYDKSVALVDCRSPDES RMWRPSQQIERVTWHHPSPC EMSTDDGFVYNLDARSDKE FLASTDDGFVYNLDARSDKE TLNAFNDEISGLDLSSQIKGC VTASADKYVKIWDILGDRPS HISRDMKMGVLFCSSCCPDLE YAFGGQKEGLRVWDISTVSS NEAFGRREILVLGSARNSSIS FGSRSSDTPMES | 6670 | 37038 | Α | 6720 | 90 | 1621 | HGLDLRTMNRSRQVTCVAWV |
| SPLEGSMOSARTOARPREPI DGDPED\DRILDDELAEYD KYDEGDPDAETLGESLIGI VYGSNDQDPYVTLKDTEQYI EDFLIKPSDNLIVCGRAEQDC NLEVHYYNQEDSFYVHHDI SAYPLSVEWLNFDSPTDDSTT YIA VGNMTPVIEVWDLDIVDU EPVFTLGSKLSKKKKKKGKK SAEGHTDAVLDLSWKLLIRR LASASADNTVILWDMSLGKF ASLAVHTDKVQTLQFHPFEA LISGSYDKSVALYDCRSPDES RWWRFSGQJERYTWHNFSPC FLASTDDGFVYNLDARSDKF TLNAHNDEISGLDLSSQIKGC VTASADKYVKIWDILGDRPS HSRDMKMGVIFCSSCCPDLF YAFGGQKEGLRV WDISTVSS NEAFGRERLVLGSARNSSIS FGSRSSDTPMES | | | | | | | RCGVAKETPDKVELSKGGVKR |
| GOPEDURITLDOBELAEVD KYDEGDPURITLDOBELAEVD KYDEGDPURITLGIESLLGI VYGSNDQDPYVTI.KDTEQYI EDFLIKFSDNLIVCGRAEQDC NLEVHYVNQEEDSFYVHHDI SAYPLSVEWLNFDFSPDDST YIA VGNNTPULWVDLDIVD EPVFTLGSKLSKKKKKKKGKK SAEGHTDAVLDLSWNKLIRN LASASADNTULWWMSLGKF ASLAVHTDKVQTLQFHPFEA LISGSYDKSVALYDCRSPDES RMWRFSQQIERVTWNHFSPC FLASTDDGFVYNLDARSDKP TLNAHNDEISCDLDSSQIKGC YTASADKYVKIWDILGDRPS HISRDMKMGVIPCSSCCPDLF YAFGGQKEGLRVWDISTVSS NEAFGRERIVLGSARNSSIS FGSRSSDTPMES | l | | 1 | | | | LIAEAEEKLQEEGGGSDEEKTG |
| KYDEEGPPAETLGISELGI VYGSNDQDPVTILKDTEQYI EDFLIKPSDNLIVCGRAEQDC NLEVHVYNQEEDSFYVHHDI SAYPLSVEWLINFDFSPDDSTI YIAVGNMTPVIEVWDLDIVD EPPYFILGSKLSKKKKKKGKK SAEGHTDAVLDLSVMKLIRN LASASADNTVILWDMSLGKI ASLAVHTDKVQTLQFHPFEA LISGSYDKSVALYDCRSPDES RMWRFSCQIERVTWHHFSPC FLASTDDGFVYNLDARSDKF FLASTDDGFVYNLDARSDKF TLNAINDEISGLDLSSQIKGC VTASADKYVKIWDILGDRPS HISRDMKMGVLFCSSCCPDLE YAFGGQKEGLRVWDISTVSS NEAFGRREILVLGSARNSSIS FGSRSSDTPMES | | | 1 | | l | | SPLEEG\MQSARTQARP\REPLE\ |
| VYGSNDQDPYVTI.KDTEQYI EDFLIKPSDNLIVCGRAEQDC NLEVHYVNQEEDSFYVHHDI SAYPLSVEWLNFDFSPDDSTT YIA VGNMTPVIEVWDLDIVD EPVFTLGSKLSKLKKKKKGKK SAEGHTDA VLDLSWNKLIRN LASASADNTVILWDMSLGKF ASLA VHTDKVQTLQFHPFEA LISGSYDKSVALYDCKSPDES RMWRFSGQJERVTWNHFSPC FLASTDDGFVYNLDARSDKP TLNAHNDEISGLDLSSQIKGC VTASADKYVKIWDILGDRPS HISRDMKMGVIFCSSCCPDLE YAFGGQKEGLRV WDISTVSS NEAFGRERLVLGSARNSSIS FGSRSSDTPMES | | | l | | ŀ | | DGDPED\DRTLDDDELAEYDLD |
| EDFLIKPSDNLIVCGRAEQDC NLEVHVYNQEEDSFYVIHDI SAYPLSVEWLNFDPSPDDSTY YIA VGRMTFPVIEWDLDIVD EPVFTLGSKLSKKKKKKGK SAEGHTDAVLDLSWRKLIRR LASASADNTVILWDMSLGKF ASLAVHTDKVQTLQFHPFEA LISGSYDKSVALYDCRSPDES RMWRFSGQIERVTWHHFSPC FLASTDDGFVYNLDARSDKF TLNAHNDEISGLDLSSQIKGC VTASAKYVKIWDLIGDRPS HSRDMKMGVLFCSSCCPDLE YAFGGQKEGLRVWDISTVSS NEAFGRREILVLGSARNSSIS FGSRSSDTPMES | İ | | 1 | | i | | KYDEEGDPDAETLG\ESLLGLT |
| NLEVHYYNQEDSFYVHIDI SAYPLSVEWLNFDPSPDDSTO YIA VGNMTPVIEVWDLDIVD EPVFTLGSKLSKKKKKKGKK SAEGHTDAVLDLSWKLLIRN LASASADNTVILWDMSLGKI ASLAVHTDKVQTLQFHPFEA LISGSYDKSVALYDCKSPDES RWWRFSGQIERVT WHIFSPC FLASTDGGFVYNLDARSDKF TLNAHNDEISGLDLSSQIKGC VTASADKYVKIWDILGDRPS HISRDMKMGVLFCSSCCPDLI YAFGGQKEGLRV WDISTVSS NEAFGRERLVLGSARNSSIS FGSRSSDTPMES | | | 1 | | | | VYGSNDQDPYVTLKDTEQYER |
| SAYPLSVEWLNFDPSPDDSTY YIA VGNMTPVIEV WDLDIVD EPVFTLGSKLSKKKKKKKK SAEGHTDAVLDLSWNKLIRN LASASADNTVILWDMSLGKF ASLAVHTDKVQTLQFHPFEA LISGSYDKSVALYDCRSPDES RMWRFSQQIERVTWNHFSPC FLASTDDGFVYNLDARSDKP TLNAHNDEISGLDLSSQLKGC YTASADKYVKIWDILGDRPS HISRDMKMGVLYCESSCCPDLE YAFGGQKEGLRVWDISTVSS NEAFGRERILVLGSARNSSIS FGSRSSDTPMES | | | 1 | | | | EDFLIKPSDNLIVCGRAEQDQC |
| YIAVGNMTPVIEVWDLDIVD EPVFTLGSKLSKKKKKKGKK SAEGHTDAVLDLSWKLIRK LASASADNTVILWDMSIGKE ASLAVHTDKVQTLQFHPFEA LISGSYDKSVALVTCRSPDES RMWRFSGQIERVTWHHFSPC FLASTDDGFVYNLDARSDRF TLNAFNDEISGLDLSSQIKGC VTASADKYVKIWDILGDRPS HISRDMKMGVLFCSSCCPDLE YAFGGQKEGLRVWDISTVSS NEAFGRREILVLGSARNSSIS FGSRSSDTPMES | | | ı | | | | NLEVHVYNQEEDSFYVHHDILL |
| EPVFTLGSKLSKKKKKKGKK SAEGHTDA VLDLSWNKLIRN LASASADNTVILWDMSLGKF ASLA VHTDKVQTLQFHPFEA LISGSYDKSVALYDCKSPDES RMWRFSGQJERVTWNHFSPC FLASTDDGFVYNLDARSDKP TLNAHNDEISGLDLSSQIKGC VTASADKYVKIWDILGDRPS HISRDMKMGVLFCSSCCPDLF YAFGGQKEGLRV WDISTVSS NEAFGRERLVLGSARNSSIS FGSRSSDTPMES | | | ı | | | } | SAYPLSVEWLNFDPSPDDSTGN |
| SAEGHTDA VLDLS WNKLIRN LASASADNTVILWDNSLGKF ASLA VHTDKVQTLOFHPFEA LISGS YDKS VALYDCRS PDES RMWRFSG QIERVTWNHFSVC FLASTDDGFVYNLDAR SDLFP TLNAHNDEISGLDLSSQIKGC VTASADK YVK IWDILGDRPS HISRDMKMGVLFCSSCCPDLF YAFGG QKEGLRV WDISTVSS NEAFGRREILV LGS ARNSSIS FGSRSSDTPMES | | ļ | i | | | | YIAVGNMTPVIEVWDLDIVDSL |
| LASASADNTVILWDMSI,GKF ASLAVHTDKVQTLQFHPFEA LISGSYDKSVALYDCRSPDES RMWRFSGQIERVT WHIFSPE FLASTDDGFVYNLDARSDKF TLNAINDEISGLDLSSQIKGC VTASADKYVKIWDILGDRPS HSRDMKMGVLFCSSCCPDLF YAFGGQKEGLRV WDISTVSS NEAFGRREILVLGSARNSSIS FGSRSSDTPMES | | 1 | l | | | | EPVFTLGSKLSKKKKKKKGKKSS |
| ASLAVHTDKVQTLQFHPFEA LISGSYDKSVALVDCRSPDES RMWRFSQGJERVTWNHFSGF FLASTDDGFVYNLDARSDKF TLNAHNDEISCLDLSSQIKGC VTASADKYVKIVDILGDRPS HSRDMKMGVLFCSSCCPDLF YAFGGQKEGLRVWDISTVSS NEAFGREELLJGSARNSSIS FGSRSSDTPMES | | | l | | | | SAEGHTDAVLDLSWNKLIRNV |
| LISGSYDKSVALYDCRSPDES RMWRFSQQIERVTWNHFSVC FLASTDDGFVYNLDARSDKF FLASTDDGFVYNLDARSDKF TLNAHNDEISGLDLSSQIKGC VTASADKYVKIWDILGDRPS HISRDMKMGVLFCSSCCPDLF YAFGGQKEGLRVWDISTVSS NEAFGRREILVLGSARNSSIS FGSRSSDTPMES | | 1 | l | | | | LASASADNTVILWDMSLGKPA |
| RMWRFSGQIERVT WHIFSPC FLASTDDGFVYNLDARSDKP TLNAHNDEISGLDLSSQIKGC VTASADKYVKIWDILGDRPS HISRDMKMGVIFCSSCCPDLF YAFGGQKEGLRV WDISTVSS NEAFGRERLVLGSARNSSIS FGSRSSDTPMES | | | ı | | | | ASLAVHTDKVQTLQFHPFEAQT |
| FLASTDDGFVYNLDARSDKP TLNAHNDEISGLDLSSQIKGG VTASADKYVKIVDILGDRES HSRDMKMGVLFCSSCCPDLF YAFGGQKEGLRVWDISTVSS NEAFGRREBLVLGSARNSSIS FGSRSSDTPMES | | | ı | | | | LISGSYDKSVALYDCRSPDESH |
| TLNAHNDEISGLDLSSQIKGC VTASADKYVKIWDILGDRPS HISRDMKMGVIFCSSCCPDLE YAFGGQKEGLRVWDISTVSS NEAFGRREILVLGSARNSSIS FGSRSSDTPMES | | | l | | ŀ | | RMWRFSGQIERVTWNHFSPCH |
| VTASADKYVKIWDILGDRPS HSRDMKMGVLFCSSCCPDLF YAFGGQKEGLRVWDISTVSS NEAFGRREELVLGSARNSSIS FGSRSSDTPMES | | 1 | | | | | FLASTDDGFVYNLDARSDKPIF |
| HSRDMKMGVLFCSSCCPDLF YAFGGQKEGLRVWDISTVSS NEAFGRREALL/GSARNSSIS FGSRSSDTPMES | | | 1 | | | | TLNAHNDEISGLDLSSQIKGCL |
| YAFGGQKEGLRV WDISTVSS NEAFGRERLVLGSARNSSIS FGSRSSDTPMES | | | | | | | VTASADKYVKIWDILGDRPSLV |
| YAFGGQKEGLRV WDISTVSS NEAFGRERLVLGSARNSSIS FGSRSSDTPMES | 1 | | 1 | | | l | HSRDMKMGVLFCSSCCPDLPFI |
| NEAFGRERLVLGSARNSSIS FGSRSSDTPMES | | | | | | | YAFGGQKEGLRVWDISTVSSV |
| | | | | | 1 | | NEAFGRRERLVLGSARNSSISGP |
| 6671 37030 A 6721 1 540 | | 1 | | | 1 | | FGSRSSDTPMES |
| 10071 37037 A 0721 1 1347 | 6671 | 37039 | Α | 6721 | 1 | 549 | |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------------|------------|----------|------------|-------------------|-----------------------------|---|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | uf peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 6672 | 37040 | A | 6722 | 1 | 1318 | AKOOLNLRTHMADENKNEYA |
| 0072 | 3.0.0 | ľ. | 0.22 | ľ | 1.5.10 | AQLQNFNGEQHKHFYVVIPQIY |
| | | | | | | KOLOEMDERRTIKLSECYRGFA |
| | l | | | | | DSERKVIPIISKCLEGMILAAKS |
| | i | l | | | | VDERRDSOMVVDSFKSGFEPPG |
| | | | | | | DFPFEDYSQHIYRTISDGTISAS |
| | į. | | | | | KOESGKMDAKTTVGKAKGKL |
| | 1 | | | | | WLFGKKPKPQSPPLTPTSLFTSS |
| | l | ı | | | | TPNGSOFLTFSIEPVHYCMNEIK |
| | | | | | | TGKPRIPSFRSLKRGWSVKMG/ |
| | | 1 | | | | AALEDFSHLPPEORRKKLOORI |
| | | | | | | |
| | 1 | 1 | | | | DELNRELQKESDQKDALNKMK DVYEKNPOMGDPGSLOPKLAE |
| | | 1 | | | | |
| | | | | | | TMNNIDRLRMEIHKNEAWLSE VEGKTGGRGDRRHSSDINHLVT |
| | | | | | | |
| | i | | | | | QGRESPEGSYTDDANQEVRGPP |
| | | 1 | | | | QQHGHHNEFDDEFEDDDPLPAI |
| | | | | | | GHCKAIYPFDGHNEGTLAMKE |
| | | | | | | GEVLYIIEEDKGDGWTRARRQ |
| 6672 | 27041 | ١. | 6723 | 1 | 741 | NGEEGYVPTSYIDVTLEKNSKG |
| 6673 6674 | 37041 | A | 6724 | 1 | 1063 | MPFYISDLSICGDRILRALCPOD |
| 00/4 | 37042 | ^ | 0724 | 1 | 1003 | LPTYSLHSRGKMRASCSRKFLD |
| | | l | | | | NNSSRLVSCNMGALISIWGTTT |
| | | | | | | PPLHATILDSQPTVHPPLAKDCL |
| | | | | | | PCGLOASASDLRARALORLCO |
| | l | | | | | QLPWVGSQPHTRSPSPQRGGKT |
| | | | | | | GLFAGLASSVSMRPASPPSPAA |
| | l | | | | | |
| | l | | | | | DSCSACRFFARRPPLRVTWVKP |
| | | | | | | SSALALCVSISDSIPGNLKALPA |
| | | | | | | ETRAQLHHAEASLSQPPLQLRP |
| | i | | | | | FPKTSQAGDLQDLGPYVCVRK |
| | | l | | | | AVGKGDKQIRAVVKEHSVRSQ |
| | | | | | | ERIWHYPGITTANMPGHLGQNT |
| | | l | | | | ESGRDKLPMFGVWFPGCRFWG |
| l | | | | | | LWVWRLP*LKLAAPCRPSRSLR |
| | L | <u> </u> | | | | SSPISRRASTTRCLTVSGCPAAP |
| 6675 | 37043 | Α | 6725 | 25 | 573 | |
| 6676 | 37044 | A | 6726 | 1 | 483 | |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| l | sequence | 1 | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 6677 | 37045 | IA | 6727 | 1 | 996 | MVGKAKWKPIELPLLRKIVNO |
| 1 | 15.015 | 1. | 0,2, | ľ | | KOYHIPGGVAKISATIKDLKDV |
| | | 1 | | 1 | | GVVIPTTSPFNSPIWPVQKTDGS |
| | | 1 | | 1 | i | WRKW\LS*QGQQFT/FTVLPHG |
| l | | 1 | | | | YINSLALCHNLIRRDLDHFSLPO |
| | | | | | | DITLVHYIDDIVLTGSSEOEVAN |
| | | | | | | TLDLLTSLDWALVETECLTMG |
| | | 1 | | | | |
| | 1 | 1 | | | | HQVTMQPELTIMNWALSDPSN |
| | | | | 1 | | YKVGCAQQHSIIKWKWYIRDQ |
| 1 | | 1 | | | | ARAGTTCKWTAAALQPLSRTS |
| | | 1 | | | | LKDSGERKSSQWAELRAVHLI |
| | | | | | | MHFAWKEKWPDVQLYTDSWA |
| | | | | | 1 | VANGSAGWSGTWKNHDWKIA |
| | | | | | | TTVIAQWAHEQSSHGSRNGGY |
| | | | | 1 | | TWAQQHGLPLTKADVATATDE |
| | | _ | | | | CPICQQQRPTLSP |
| 6678 | 37046 | Α | 6728 | 2 | 1380 | CLAGLFGFWSPCIPHLGVLLQSI |
| | | | | 1 | l ' | YLVTQKAA/SSEWGPEQEKALQ |
| | | | | 1 | | EVQAAVQAALILEPYDPAGPVV |
| | | | | | | LEVSLADRDAVWSLWQAPIGE |
| | | | | | | SQQRPLGFWSKALPSSA/DHKA |
| | | | | | | CHAQQHSIIKWKWYIHDRARA |
| | | | | | | GPEGTNSSARYAATM*KW\TAS |
| | | | | | | ALQPLSRKSLKDSSEGKSSQWA |
| | | | | | ŀ | ELRAVHLAVHVAWKEKWPDV |
| | | | | | 1 | RLDTDSWAVANGLARWSGTW |
| | | | | | | KEHDRKIGDKEVWGRGTRIELS |
| | | | | | ŀ | EWSKTVTIFVSH/VLLPRLPSIRG |
| | | | | | | LTECLIHQHGIPHSIASDQGTHF |
| | | 1 | | | | TAKELQQWAHAHGIHWSYHVP |
| | | | | | | HHPG\WGKVLQKAVYALNQRP |
| | | | | | | IYEWKEESCLHTGVADALRGN |
| | | 1 | | | | WAEGHREHKALWLGLWSTWS |
| | | | | | | QHPLRSLKTTRHHPGLGVLSED |
| | | | | | l | ICEAGGATEELSRASGFATGYG |
| | | | | | ŀ | KRKEDTKKHKQHSVSDIIEQQH |
| | | | | | | SLGLTEKTVKGTPTQGISMRPG |
| | | _ | | | | LYHKATEFQE |
| 6679 | 37047 | A | 6729 | 1 | 2229 | and opening work of the |
| 6680 | 37048 | A | 6730 | 1 | 789 | RDLQPFTSVTVHCRKGNDQTF |
| | | ı | | | | GGPLDAGSELTLIPGDPKHHCG |
| | | 1 | l | | | PPVKVGAYGGQVINGVLA\HPL |
| | | | | | | IWLVQKTDGS/WRMTVDYCKL |
| | | 1 | l | | | NQVVIPIAAAVSDVVSLLEQINT |
| l | | 1 | l | I | | SPGTWYAAIDLANAFFSIPVHK |
| | | 1 | | | | AQQKQFAFSWQGQQYTFTVLP |
| | | 1 | 1 | l | | QWYINSPALCHNLIRRDLDCFS |
| 1 | | 1 | l | I | | LPLDITLVHYIDDIMLIGSSEQE |
| | | 1 | l | | | VANTLDLFVRHLRARGWEINPT |
| | | 1 | l | | | KIQGPSTSVKFLGFQWCGACQA |
| l | | | | L | | IPSKMRDKLLHLVPPTTKKEAQ |

| SEQ ID NO: | SEQ ID NO: of peptide sequence | Met hod | SEQ ID NO: in USSN 09/540,217 | Nucleotide location of first codon for peptide sequence | Nucleotide location of last codon for last amino acid of peptide sequence | Amino acid sequence (X=Unknown, *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
|---------------|--------------------------------------|------------|-------------------------------------|--|---|---|
| 6681 | 37049 | А | 6731 | I | 553 | MTVDYCKLNQVVIPIAAAVSD VVSLLEQINTSPGTWYAAIDLA NAFFSIPVHKAQQKOPAFSWQQ QVTFTVLPQWYINSPALCHNL IRRDLDCFSLPLDITU-HYIDDI HLIGPRQLLACYWALVETEHL TISHQVTMRPELPIMNWVLFDP SSHKVGCAQQHSIIKWKWYVH DWARAGPEGT |
| 6682 | 37050 | Α | 6732 | 3 | 266 | |
| 6683 | 37051 | Α | 6733 | 3 | 582 | |
| 6684 | 37052 | Α | 6734 | 3 | 403 | |
| 6685 | 37053 | Α | 6735 | 1 | 2712 | |
| 6686 | 37054 | A | 6736 | 875 | 1506 | LISIYLYTQKAA/SSEWGFEQEK ALQEVQAA/QALLIEPYDPA GPVVLEVSLADRDAVWSLWQ APIGESQQRPLGFWSKALPSSA/ DHKACHAQOHSIIKWKWYHID RABAGPEGTNSSARYAATM*K WTASALQPLSRKSLKDSSEGK KWTDSALQPLSRKSLKDSSEGK KWPDVRLDTDSWAV/ANGLAR WSGTWKEHDRKIGDKEVWGR GTRI |
| 6687 | 37055 | A | 6737 | | 633 | MTVDYRKFRQVVTPMAA/AVP DAVSLLEGINTFPGTWYAAIDL ANAFSIPVHEAHQKQFAFLPQ GVITLVHYIDDILLIGSSEGEV NTLDILLIHKRSKEAEHTLASRIR VSCLPEQKSHEQITLPWQVPSS GDIKEYFPNAFVLLTTASLQQQ DNTSQLQLTWKAPEDIKMSKT DADADEEIEALRG |
| 6688 | 37056 | A | 6738 | 2 | | DLWPFTRYTLHRGKRNDQTTG GLLDTGSELMIPEDTKHHCOP PWK-VEA YGGQVINGVILAQIQLT VGPVGSGTHPVVIYPVPECIIGI GILSSWQNPHIGSLTSRKTDGS WRMTYHYHKLNQMYTPIAAAI PDVVSLLEGVVNTSPGSWYAL LANAFFIPVHKAHQKQFAFSW QGQQYTFTVLPQWYINSPALCH NLIRRDLDCFSLPLDITLVHYID DIMLIGSSEQEVANTLDLFVRH LARGWEINFYKIQGFSISWKFL GFQWCGACQAIPSKMRDKLH LVPPTTKKEAQCLQLLACY/W ALVETEHLTISHQVTMRFELPI MNWVLFDFSSHKVGCAQQHSII KWKWYYHDWARAGFEGTI |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | 1 | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | ļ. | | | sequence | | |
| 6689 | 37057 | IA | 6739 | 1 | 2058 | |
| 6690 | 37058 | A | 6740 | 2 | 1173 | WEVROYTFTVVPQGHINSLVLO |
| | | | | 1 | | HDVVRRDLGHFFLPQDITLVHY |
| | | | | | | IDDIMLIGSTPPITKKKAQHLVG |
| | | 1 | | ŀ | 1 | LFGFWROLVPHLGVLLWPIYO |
| | | 1 | | | | VTQQAASFEWGPEKEKALQQV |
| | | 1 | | | | OAAVOAALPLGPYDPADPMVL |
| | 1 | 1 | | | | EVSVADRDAVWSLWODPIGES |
| | | 1 | | | | OWRSLGFWSKALPSSADNYSPI |
| | | 1 | | | | EROLLACYWVLVETERL\OWV |
| | 1 | | | | | TPAEEDFNNQVDRMTHSVDTT |
| | | | | | | QPLSPATHVITQWAHEQSGHG |
| | | 1 | | | | GRDGGYTRVQQHGLPLTKADL |
| | | 1 | | | | ATAGKVFOKAV*ALN*HSIYGT |
| | | 1 | | | | LSLIARIHRSRNOGVEVEVAPLT |
| | | 1 | | | ł | ISPSDPPAKFLLPVPPTLRSAGLE |
| | | 1 | | | | FLVPEEGMLPSGDTTVPLNWKL |
| | | 1 | | | ł | RLPPGHFGLLFPLHQQANKGVT |
| | | 1 | | | | VLVGVTDLDYODEISLLPHNG |
| 6691 | 37059 | A | 6741 | 823 | 2487 | KELKLWKNRHKLLSYPTVGAA |
| 007. | 3,037 | Ι. | | 023 | 1.07 | VTOLONLTAMGVIGSHGARGO |
| | | 1 | | | ŀ | VVALNROROGDLOPFTRVTVH |
| | | ł | | | | WGKG/NMOIFGGLLDTGSELTL |
| | | 1 | | | | IPGDPKHHCGPPVKVGAFGG\Q |
| | | 1 | | | | VINGALARVQLIVGPVGPWAHI |
| | | 1 | İ | | | VVISPVPECIIDIDILSSWONPHIS |
| | | 1 | | | | SLTGRVRAIMVGKAKWKSLEL |
| | | 1 | | 1 | i . | PLPRKIVNQKQYHIPGGIVEISA |
| | | 1 | | 1 | | TIKDLKDAGEVIPIPTTFPLNSPI |
| | | ļ | | | | WPVRKTDGCWRMTVDYCELN |
| | | 1 | | | | QVVTPTAATVPDVVSLLEQINT |
| | | 1 | | | | SPGTWYADIDLANAVFSIPVHK |
| | | 1 | | | 1 | AHQKQFAFSWQGQQYTFTVLP |
| | | 1 | | | | OEYINSLGLCHNLIORDLDHFSL |
| 1 | | i | | | 1 | LQDITLVHYIEDIMLIGSTEQEIA |
| 1 | | | | | | NTLDLLFMAKEVWOWAHAHG |
| | | | | | | IHWSYHVSHHPEAAGLIEWWK |
| | | | | | | GLLKLQLQCQLGDNTLEGWGK |
| l | | | | | | VLQKTVYALNQHPIYGTVSPIA |
| | | | | | | RIHRSRNKGVEVAPFTITPSDPL |
| | | 1 | | | i | POFLLPVPATLCSAGLEVLAPE |
| l | | 1 | 1 | | 1 | GGTLPPGDRTTIPLNWKLRLPP |
| | | 1 | | | | EDFGLLPSLSOOAKKGVTVLAG |
| | | 1 | | | | VIHPDYQDEISLLLHNGCKEDL |
| 6692 | 37060 | A | 6742 | 3 | 350 | TALL DI QUEISCECHINGCKEDE |
| 6693 | 37060 | A | 6743 | 1 | 3339 | |
| 6694 | 37062 | A | 6744 | 1 | 2271 | |
| 0094 | 1002 | _^_ | 10/44 | <u> </u> | 2211 | <u> </u> |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | |
|--------|------------|-----|------------|-------------------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codnn for last amino acid | *=Stnp codon, /=possible nuclentide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 6695 | 37063 | A | 6745 | 3 | 1377 | AHLAADDFCTK*GWVSG\LPOG |
| | | | | | | LDKLTLPGANLEMOPENLKED |
| | 1 | 1 | | | | LVYLKKNHEELSMAIKRNESM |
| | i | 1 | | | | AKGLQRALLQQQPEDDSKCFP |
| | | | | | | RPODLIRLYDIILOLTLEDREGK |
| | | 1 | | | | GLSFSFACVDKDVSVKMDTVP |
| | | 1 | | | | GVNLSCILNEMRDQDKKLVEK |
| | | 1 | | | | SCKDAQGWFFSLKALLEGSLVE |
| | | 1 | | | | TEVCYRTQLAQLOGLIRSMEQQ |
| | | 1 | | | | LCELCCDAEHODHEHOVLLDV |
| | 1 | 1 | | | | KTOLEGEIATYSRLLEVEDAQL |
| | | 1 | | • | | ATQYSLSLASQPTREDLEKAIL |
| 1 | | 1 | | | | KFIWNONRAQIAKTILSKKSKA |
| | | 1 | | | | RGIMLPSFKIYYKTTVTKTAWC |
| | | 1 | | | | WYKNRHIDOWNRIENPEIRPHT |
| | ŀ | | | | | YNHVIFDKPDKRKOWGKDSLF |
| | | | | | | NKWCWENWLAICSKLTLDPFL |
| | | | | | | NPYTKVNSRWIKDLNLQPKTIK |
| | 1 | l | | | | ILKENLGNAIQDTGKGKDFMTK |
| | i . | ı | | | | MPKAIATKAKIDKWDLIKLKSF |
| | | | | | | CTALRNYQQSKPTTYRMGENF |
| 6696 | 37064 | Α | 6746 | 1 | 882 | ornela i i dona i i i i ande i i |
| 6697 | 37065 | A | 6747 | 13 | 1402 | STGSTHACDLLFSPSPVCLPPAA |
| | | | | | | ATMTTSIR\QFTSSS\SIKGSSGL |
| | | | | | | GGG\SSRTSCRLSGGLG\AGSCR |
| 1 | ŀ | | | | | LGSAGGLGSTLGG\SSYSSCYSF |
| | | ĺ | | | | GSGGGYGSSFGGVDGLLA\GGE |
| | | | | | | KA\TMONL\ND\RLGSYLDKVPC |
| | | 1 | | | | PWKEANTELEVKI\RDLVTRGR |
| l | l | | | | | APGPARDYSQYYRTIEELQNKI |
| | l . | | | | | LTATVDNANILLQIDNARLAAD |
| | l . | l | | | | DFRTKFETEQALRLSVEADING |
| | | [| | | | LRRVLDELTLARADLEMQIENL |
| | | l | | | | KEELAYLKKNHEEEMNALRGO |
| | | | | | | VGGEINVEMDAAPGVDLSRILN |
| | 1 | 1 | | | 1 | EMRDQYEKMAEKNRKDAEDW |
| | | 1 | | | | FFSKTEELNREVATNSELVOSG |
| | | 1 | | i | | KSEISELRRTMQALEIELQSQLS |
| | | 1 | | l | | MKASLEGNLAETENRYCVQLS |
| | | l | | | | QIQGLIGSVEEQLAQLRCEMEQ |
| | | l | | | | QNQEYKILLDVKTRLEQEIATY |
| 1 | | 1 | | 1 | | RRLLEGEDAHLTOYKKEPVTTR |
| | | l | l | l | 1 | OVRTIVEEVODGKVISSREOVH |
| 6698 | 37066 | A | 6748 | 2 | 452 | FLLPSSFSCTHSLLSPTITIVPGP |
| 1000 | 1 7000 | l^ | 1 . 40 | Ī~ | | DFNLASHIIPDTTPDPHDCISMIH |
| | 1 | | İ | | 1 | LTFTPFPHISFFPVPHPDHA*FID |
| | | ŀ | l | | | GSSTRPNRHTPAKAGYAIAQAT |
| | 1 | | l | i | | IPPLRTSHFLSIVEIYPQGNNFSV |
| | | | l | 1 | | FHVLFYYSSGIIQAPSLPYTLRR |
| | | | | 1 | | DRRPGTSRA |
| 6699 | 37067 | A | 6749 | 1 | 1791 | DIRTUISRA |
| 0099 | 19/00/ | JA. | 0749 | L' | 1791 | |

| SEQ ID | | | SEQ ID NO: | | | Amino acid sequence (X=Unknown, |
|--------------|------------------------|-----|-----------------------|--|--|---|
| NO: | of peptide sequence | hod | in USSN 09/540,217 | location of first codon for peptide sequence | codon for last amino acid of peptide sequence | *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
| 6700 | 37068 | A | 6750 | 1 | 219 | |
| 6701 | 37069 | A | 6751 | 2 | 528 | TLTVESKSIKAYKLSLOFPHFTC |
| | | | | | i | PKTGHALOVSSGFVESPTVTIVP |
| | | | | | | GLDINLASHTIPDNTPEPHDCIS |
| | | | | | | LIHLTFTPFPHVSFFPVPHPDHT |
| | | | | | | WFIDGSSTRPNCHSPAKTGYAI |
| | | | | | | VSSTLIIDATALPPSTTSQQAELI |
| i | | | | | | ALTRALTLAKGLPINIHTDSKY |
| - | | | | | | AFHILHHHAVI*AER |
| 6702 | 37070 | В | 6752 | 1 | 1744 | |
| 6703 | 37071 | Α | 6753 | 1 | 1376 | MCKRMPGLQASQTVCPFYDKN |
| | | | | i | | YLDLKRKGTEIKRRERLKCGTK |
| | | | | l | | IERRKRLRDSERLEKRIKRGCLP |
| | | 1 | | | 1 | DLKLSTEIQINRLRGLYTLLRKE |
| | | 1 | | l | | RRFGLQETINYAEVTGIYVKELI EDREHLNSGKYIFNIFDIKVPRV |
| | | 1 | | | | VFGIIDPYMLWEKKEGTKEGIK |
| | | 1 | | | | EGMKRESOKRIKWERSFITFIAL |
| | | 1 | | | | NTADRTLMSSAGCYRKQVKIHI |
| | 1 | 1 | | | | DALPPPNSQTLKKRGGASLIISF |
| | | | | | | RRQSGPSAAGLWEFARGPFQTL |
| | | 1 | | - | | FAWLSPAEAAEQQRLLPASSAE |
| ļ | | | | | | SFIAEGDPPDAGQSSPPSSLHAA |
| | | 1 | | | | AATALMLLEALKITNYAQLTLY |
| | | | | | | SSPNFQNLFSSSHLTHILSADWL |
| İ | 1 | | | | | LOLYSLEVESPTITIVPGPDFNPA |
| | | | | | | FHFIPDTTPDPHDCISLIHLTFTP |
| | | | | | 1 | FPHISFFPVPHPDHTWFIDGSST |
| | 1 | 1 | | | | RPNRHTPAKAGYA/DGRNTSYC |
| | 1 | - | | | | VLSPVGNSPLVPNPGSARCTEG |
| | | | | | | GLLYARA |
| 6704 | 37072 | В | 6754 | 400 | 820 | |
| 6705 | 37073 | В | 6755 | 1 | 1190 | |
| 6706 | 37074 | A | 6756 | 1 | 1002 3216 | |
| 6707 6708 | 37075 37076 | B | 6757 6758 | 1 | 4020 | |
| 6709 | 37077 | A | 6759 | 1 | 1155 | |
| 6710 | 37078 | A | 6760 | 2 | 346 | SSYLMHILSAPNLLOLYSLEVES |
| 0,10 | 1,,,, | 1 | | 1 | | PTITIVPGPDFNLASHIILDTTPD |
| l | | 1 | | | | PHDYLSDPPDIHS/TFP/DISFFPV |
| | 1 | 1 | | | | PHPGHTWFNDGSSTRPNRHSPA |
| | | 1 | | | | KAGHAIVFSTSIIEATALPPSTT |
| 6711 | 37079 | A | 6761 | 189 | 1201 | |
| 6712 | 37080 | Α | 6762 | 1 | 231 | |
| 6713 | 37081 | A | 6763 | 1 | 834 | |
| 6714 | 37082 | Α | 6764 | 470 | 479 | PRNPSSFLQVQVQHRFLQLFVP |
| 1 | İ | 1 | | | | FHFVFFLASLYVMVTLTTWFR* |
| 1 | | | l | | | DPCVSGMALNCSFLKIASSSGE |
| 6715 | 37083 | A | 6765 | 21 | 706 | YLRPTPSYLNQVVRVTMT |
| 6716 | 37083 | A | 6766 | 1 | 158 | |
| 0710 | 27004 | I'A | 0700 | 1' | 1120 | L |

| SEQ ID | Tero In No. | INC. | SEQ ID NO: | Municatida | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------------------|-----------|-----------------------|--|--|--|
| NO: | of peptide sequence | hod | in USSN 09/540,217 | location of first codon for peptide sequence | codon for last amino acid of peptide sequence | *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
| | | Ļ | | | | |
| 6717 | 37085 | С | 6767 | 78 | 401 | |
| 6718 | 37086 | Α | 6768 | 536 | 694 | |
| 6719 | 37087 | Ċ | 6769 | 1 | 1410 | |
| 6720 | 37088 | В | 6770 | 1 | 1836 | |
| 672I | 37089 | Α | 6771 | 306 | 487 | VGFLGILF/CFEAIVNVSSLMIW |
| | | 1 | | | l | LSVCLLSVYKNACDFCTLILYP |
| 6722 | 37090 | A | 6772 | 714 | 1096 | ETLLKLLISSSSLYLW FFLPMSMECSSICLYPL/CISLRS |
| 6/22 | 37090 | A | 6/12 | /14 | 1096 | GL*FSLKRSFTSLVSWIPRYFILC |
| | | į. | | | | KSQGMRWLGLGSEA*YSCLLIL |
| | | | | | l | IRKITONSVEVLGRRKFLGGGM |
| | | | | | | EREWVMFLRAASSGIRGSVGT |
| 1 | | | | | | NFKSESRHOISCASV |
| 6723 | 37091 | c | 6773 | I | 2796 | NI KSESKI QISCAS V |
| 6724 | 37091 | A | 6774 | 126 | 490 | FFLPMSMECSSICLYPLLFPGAV |
| 0724 | 37092 | ^ | 0774 | 120 | 490 | VCSSP*RGPSHPL*VGFLGILF/C |
| 1 | | ı | | | | FEAIGNGSSLMIWLSVCLLLVY |
| 1 | | 1 | | | | KNACDFCTLILYPETLLKLLISL |
| i | | 1 | | | 2. | RRFWAETMGFSRYIIMSSANRD |
| 1 | | 1 | | | | NLTSSFPN |
| 6725 | 37093 | A | 6775 | 1 | 550 | NETSSI III |
| 6726 | 37094 | A | 6776 | 578 | 865 | MCPRDYGMLCLCSH\CFKEHLY |
| 0720 | 3,004 | l^ | 0770 | 570 | 505 | FCLHFVMYPVVIOEQVVOFPCS |
| | İ | 1 | | | | *AVLSEFLNPEF*FDCTVV*ETV |
| ļ | | 1 | | | ! | CYNF*SFTFAEKSFTSNSVVNFG |
| ŀ | | 1 | | | | IGVVWC |
| 6727 | 37095 | Α | 6777 | I | 2091 | |
| 6728 | 37096 | C | 6778 | I | 1458 | |
| 6729 | 37097 | В | 6779 | 1 | 504 | |
| 6730 | 37098 | Α | 6780 | 70 | 511 | NHASPGIRNLFLHPRGLRAITIA |
| | | 1 | | | | VFCKQNTYIRLEPFKINVLEQIT |
| | | 1 | | | | KHIEKLQCGGVVKQLSRRGNN |
| 1 | | 1 | | | | QHISSTYDINRADTQVRRAVNN |
| İ | | 1 | | | | YDII\A*ATVSMASRSIRCGSVGS |
| | | 1 | | | | LPSSNLPINSVSIRCRARQEGIM |
| | | | | | | SSPGQQVGFIA |
| 6731 | 37099 | A | 678 I | 3 | 306 | |
| 6732 | 37100 | Α | 6782 | 1 | 3567 | MHIVVETALSASWQNKAKPPA |
| | | 1 | | | | RVLLQVVPNVWFLVAVVWEL |
| | | 1 | | | | YPSLDLMDRSIECSSSPATEQS |
| 1 | | 1 | | | | WTENDYDKLREEGFRRSNYSE |
| | | 1 | | | | LQEDIQTKGKDVENFEKNLEEC |
| | | 1 | | | l | ITRITNTQKCLKELMELKTKAR |
| | | 1 | | | | ELREECRSLRSRCDQLEERVSV |
| | | 1 | | | | MEDEMNEMKQEGKFREKRIKR |
| 1 | | | | | | NEQSLQEIWDYVKRPNLRLIGV |
| | | | | | | PESDGENGTKLKNTLQDIIQENF |
| | | 1 | | | | PNLARQAKVQIQEIQRMPQRYS |
| | | <u> </u> | | | | LTRATPRHIIVRFTKVE |
| 6733 | 37101 | Α | 6783 | 386 | 550 | |
| 6734 | 37102 | Α | 6784 | 1 | 594 | |

| Amino acid sequence (X=Unknown, *-Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) MGKKQSRKTGNSKRQSASPPP |
|--|
| MGKKQSRKTGNSKRQSASPPP |
| |
| |
| KERSSSPAMEQSWMENDFDEL |
| REEGFRRTNYSELQEGIQTKGK |
| EVKNFEKNLDECITRITNTEKCI |
| KELMELKAKARELREECRSLRS |
| RCDOLEERHHTTPIPKLTTYLE |
| VKLSPANVKEQVITNCLSDHSA |
| IKLELRIKKPTQNPSTTWKLNN |
| LLLNDYWVNKEMKSEIKMFFE |
| TNENKNTTYONLWDAFKAVCH |
| GKFIALNAHKGKQERSKIDTLT |
| SOLRELEKOEOTHSKVSRROEI |
| TKIRAEPKEIETQKTLQKINESR |
| SWFFERINKIDRRLARLIKKKRF |
| KNORDAIKNDEGDITTDPTEIQT |
| TIREYYKHLYANKLENLKEMD |
| KFLNTYTLPRLNQEEAESLNRP |
| AGSEIVAIINSLPTKKSPGPDGFT |
| AEFYQRYKEKLVFGAGYFGM |
| WALAALPSNLLKLSQLCQEAA |
| EVNVLVQFVCIC*SCLNSVRRQ |
| |
| |
| CD CLONAL NAVIONAL ALL COLUMN |
| CRCLQMAM*WS*AIALSMKIS MSPRKPEV*IKVLAGLCCL |
| MSFRRFEV IRVLAGLECEL |
| |
| KLLODLPFSINSSAVEKISMSTT |
| GOVIRCKAAILWKPGAPFSIEEV |
| EVAPPKAKEVRIKVVATGLCGT |
| EMKVLGSKHLDLLYPTILGHEG |
| AGIVESIGEGVSTVKPGDKVITL |
| FLPQCGECTSCLNSEGNFCIQFK |
| QSKTQLMSDGTSRFTCKGKSIY |
| HFGNTSTFCEYTVIKEISVAKID |
| AVAPLEKVCLISCGFSTGFGAAI |
| NTAKVTPGSTCAVFGLG\GVGL |
| SVVMGCKAAGAARD/IIGVDVQ |
| QGRKF*GRAQELGATEC\LNP\Q |
| ALKKPHFKEVLFDMTDAGIDFC |
| FEAIGNLDVLAAALASCNESYG |
| VCVVVGVLPASVQLKISGQLFF |
| SGRSLKGSVFGGWKSRQHIPKL |
| VADYMAEKLNLDPLITHTLNL |
| DKINEAVELMKTGKW |
| LVYLKVMGRMEPSWKTLCRIL |
| SRRTSANLSKAGQCSDSGNTEN |
| TTKILLKKSNSKTHNCOIHOS*N |
| EGKNVKGSQRERSGYPQRGRPS |
| |

| SEQ ID | ISEO ID NO. | Mer | SEO ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|-------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 6745 | 37113 | A | 6795 | 3 | 640 | |
| 6746 | 37114 | Α | 6796 | 1 | 996 | |
| 6747 | 37115 | Α | 6797 | I | 933 | |
| 6748 | 37116 | Α | 6798 | 74 | 1128 | LLLDL*VD*SPSRPLEMRFRV*P |
| | | | | | I | MKRCTILKKNYLSFLVYISRNL |
| | | | | | | *NRVKAIM/VGKAEWKTIELPL |
| | | | | | | PRKTVNQKQYRIPGGIAEISTTI |
| | | 1 | | | | KELNNAGMVIPTTSPFNSPIWP |
| | | | l | | ŀ | VQKIDGSWRMTVDYCKLNQV |
| | | 1 | | | | VTPIAATVPYVVSSLEQIN/TSPC |
| | | | | | ľ | T/WNRKRFCNRSRLLHKLLCHL |
| | | 1 | | | | GHMTQQI*CFLRCQWHIGMLF |
| | | l | | | | GPEICGCTSLSGQKL/WKIFVSH |
| | | | ĺ | | 1 | AASFEWSPEQEKALQQVQAVV |
| | | l | | | | QAALPLGPYDPADPVLLEMSV |
| | | l | | | | ADRDAVWILWQAPISESQWRPI |
| | | l | ŀ | | | GFWSKALPSSADNYSPFERQLL |
| | | 1 | | | 1 | ACYWTLVETERLTMGHQVTIP |
| | | 1 | | | | ELPIMNWVFSDLSSPKMCHPQQ |
| 6749 | 37117 | Α | 6799 | I | 229 | |
| 6750 | 37118 | Α | 6800 | 1 | 1011 | MVSTPATLPSLPKPALMASWG |
| | | | | | | VPYDQLTKEEKTRVWFTDGSA |
| | | 1 | | | | RYAGTTQKWTAVALQPLSRTS |
| | | | | | | LKDSSEGKSSQWAELQAVYLV |
| | | | | | | VHFAWKEKWPDVGLYTDSWA |
| | | | | | | VANGLAGWSETWEKQDWKIG |
| | | 1 | | | | DKEIWGRGMWMDLSEWSKAV |
| | | | | | | KIFVSHVSÅHQRVTSAEEEFNN |
| | | | | | | QVDRPL/PVFTQWAHEQSGHSG |
| | | | | l | | RDGGYSWAQQT\GLPFTKADL |
| | | l | | | | AMATAECPICQQQRPTLSPLYS |
| | | 1 | | | ì | TIPQGDQPATWWQIDYIGPLPS |
| | | | | | | WKGQKFVLTVIDTYSRYRFAY |
| | | l | | | | PAHNASAKTTIHGLIECLIHCYG |
| | | 1 | | | | IPHSIASDQSIHF/TTKEVQ*WAH |
| | | | | | | AHGIHWSYHVSHHPEAAGL |
| 6751 | 37119 | Α | 6801 | 2 | 739 | HKMGHAQQHSIIKWK*YICDW |
| ł | | 1 | | | | ARAGPKGTT\APMASWGVLYD |
| | | l | | | İ | QLTEEEKTRAWFTDGSARYAG |
| | | l | | | | TTQKWTAAALQPLSRTSLKGS |
| | | l | | | | GEGKSSQWAELQAVHLVVHFS |
| | | l | | l | | WKDKWPDVRLYIDSWAVANG |
| 1 | | l | l | | | LAGWSGTWKKHDWKIGDKEI |
| 1 | | 1 | l | l | | WGRGMWMDLSEWPKPVKIFG |
| 1 | | 1 | l | l | | SHVSAHQWVISAEEDFNNQVD |
| | | 1 | l | l | | KMTCSVDITQPLSPATPVITQW |
| 1 | | | l | I | | AHKQSGHGGRDGGYTWAQQH |
| | | L | L | | | GLPLTKTGLAMATAECPI |
| 6752 | 37120 | Α | 6802 | 1 | 354 | |
| 6753 | 3712I | Α | 6803 | 3 | 592 | |

| | SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--|--------------|-------------------------|-----|--------------|------------|-----------------------------|--|
| 1 | NO: | | | | | | |
| EQKKALQ*VQAAVQAALPL YDPADPMVLVVSVAKDVAVQAALPL YDPADPMVLVVSVAKDVADALPL YDPADPMVLVVSVAKDVADALPL YDPADPMVLVVSVAKDVADALPL YDPADPMVLVVSVAKDVADALPL HLSGSDRWRRTYRCL BGFWLSSLDKAMKENDE DSNSQIQKQILSLQSSKIILAL GTVVTQLQNLNSVGIIGSQG GQVAALSLQRQGASFEWSPI EKALQQVQTAVQAALPLCPP PSDPMVFEVSVADGAVWS QAPIGELQWR ILEFWSKALP ADNYSPFGRQLLACYWALV EHLTVDHQVTM*PELPIM 37125 | | | | 09/540,217 | | of peptide sequence | deletion, \=possible nucleotide insertion) |
| EQKKALQ*VQAAVQAALPL YDPADPMVLVVSVAKDVAVQAALPL YDPADPMVLVVSVAKDVADALPL YDPADPMVLVVSVAKDVADALPL YDPADPMVLVVSVAKDVADALPL YDPADPMVLVVSVAKDVADALPL HLSGSDRWRRTYRCL BGFWLSSLDKAMKENDE DSNSQIQKQILSLQSSKIILAL GTVVTQLQNLNSVGIIGSQG GQVAALSLQRQGASFEWSPI EKALQQVQTAVQAALPLCPP PSDPMVFEVSVADGAVWS QAPIGELQWR ILEFWSKALP ADNYSPFGRQLLACYWALV EHLTVDHQVTM*PELPIM 37125 | 6754 | 127122 | L_ | 6804 | 1126 | 365 | OLAEDDHWI PD*KGAGEEWGD |
| YOPADPMYLVSYADKDAY | 0754 | 37122 | ^ | 0804 | 120 | 303 | |
| FHLSGSDRWRTYRCL | | | İ | | | | |
| 37123 | | | į . | | | | |
| EAGWLLLSJDKAMKENDE | | 07122 | ١ | 5005 | | 626 | |
| DSNSQIQKQILSLQSSKIILLN GTVVTQLQNLNSVGIIGSQG GQVAALSLQRQGASFEWSP EKALQQVQTAVQAALPLOP PSDPMPFESVALQRAVALPLOP PSDPMPFESVALQRAV TLEFWSKALP ADNYSPFGRQLLACYWALV EHLTVDHQVTM*PELPIM 37125 | 6755 | 3/123 | IA. | 6805 | Į į | 636 | |
| GTVVTQLQNLNSVGIIGSQG GQVAALSLQRQGASFWSPI EKALQQVQTAVQAALPLGP PSDPMVFEVSVADGRAVWS QAPIGEQWR LLFEWSKALP ADNYSPFGRQLACYWALV EHLTVDHQVT7M*PELPIM 37125 | | | 1 | | | | |
| GQVAALSLQRQGASFEWSPE | | | 1 | | | | |
| | | | 1 | | | | |
| PSDPMVFEVSVADGANAWS QAPIGELQWR FLEFWSKALP ADNYSPFGRQLLACYWALV ST125 | | | 1 | | | | |
| OAPIGELQWR LLEFWSKALP | l | | 1 | | | | |
| ADNYSPEGROLLACYWALV EHLTVDHQVT/M*PELPIM 37125 A 6806 1 672 37125 A 6807 308 470 37127 A 6809 I 1908 37127 A 6809 I 1218 MGIIGSRGGRQVAALKRQ VTKKAASFEWGPEEKALQ QAAVQALPLGPYDPADPIV VSVADRGAVWSLWQVPIGE QRPLGFWSKALPSSADNDSP RQLLACYCALVETERLDMG VTMRPEVLIINCVLSDPSSH/K WRLCMDSATWTSTYQ/A*PC GHC*VPNLPAAETNTDPSIW SYG*GLASYLOG*LASYLOG*LASYLOG*LASYLOG*LASYLOG*LASYLOG*LASYLOG*LASYLOG*LASYLOG*LASYLOG*LASYLOG*LASYLOG*LASYLOG*LSSSEGCVCSEASNIWYCFSR DSWYQESRGGSGGTHHHE PTSKIFASCELDIMFCW*GC *WRNAATRRINNNFI GPEDLGJEFILSFQDPLL/SHE GEFWLYPSGAA/RASSDAQS VIAVSPLRGLNSWG 37129 B 6811 I 1452 37130 A 6812 122 1838 371310 A 6612 122 1838 | | | 1 | | | | |
| | | i . | 1 | | | | |
| 37124 | | | 1 | | | | |
| 37125 | | | | | | | EHLTVDHQVT/M*PELPIM |
| 37126 | 6756 | | | | 1 | | |
| 37127 A 6809 I 1218 | 6757 | | | | 308 | | |
| VTKKAASFEWGPEEKALO QAAVQAALPLGPYDPADPIV VSVADRGAVWSLWQVPIGE QRPLGFWSKALPSSADNDSP RQLLACYCAI.VETREILDMG VTMRPEVLIINCVLSDPSSH/ WRLCMDSATWTSTYQ/A*PC GHC*VFNLPAAETNTDPSIW S/VG*LASYLVIG**LHWTSSIN GAEVCPHWNRHLRI*VCLS QCFCED/SHPWHIELASYLPSS ST*HCL*SRHSPVS**RSVAVQ SWNSLVLPCSPSS**SSWINRN EWPFEVTITMPTR**QVSAGLA SSEGCYCSESASNIWYCFSR DSWYQESRGGGGGTIHHH PTSKIFASCFLDIMFCW**GG *WRNAATRRINNNFI GPEDLGGLFILSFQDPLLISHF CLEALAPPPSPVVPISSFPPH GEPWLYPSGAA/RASSDAQS VIAVSPLRGLNSWG 371129 B 6811 1 1452 1452 1453 1454 1 | 6758 | | | | | | |
| QAAVQAALPLGPYDPADPIV | 6759 | 37127 | A | 6809 | 11 | 1218 | |
| VSVADRGAVWSLWQVPIGE QRPLGFWSKALPSSADNDSP RQLLACYCALVETERLDMG VTMRPEVLINCVLSDPSSH/WRELACHDSATWTSTYQ/A*PC GHC*VPNLPAAETNTDPSIW S/Y/G*LASYLVIG*LHWTSSIN GAEVCPHWNRHLRI*VCLS QCFCED/SHPWHIELASYLPSS ST*HCL*SRHSPYS*FSVAVQ SWNSLVLPCSPSS*SSWINK EWPFEVTITMPTR*QVSACLL SSSEGCVCSESASNIWYCFSR DSWYQESRGGGGGTHHHH PTSKIFASCFLDIMFCW*GG *WRNAATRRINNNFI GPEDLGGLFISFQDPLL/SHP GFWLYPSGAA/RASSDAQS 37128 A 6810 901 1142 GPEDLGGLFISFQDPLL/SHP GEFWLYPSGAA/RASSDAQS VIAVSPLRGLNSWG 37130 A 6812 122 1838 137131 A 6813 101 249 MTHVTALRTSSNLMRN*RK* | | | 1 | | 1 | | |
| ORPLGFWSKALPSSADNDSP RQLLACYCALVETERLDMG | | | | | | | |
| RQLLACYCALVETRILDMG | | | | | | | |
| VTMRPEVLIINCVLSDPSSHK WRLCMDSATWTSTYQA*PC GHC*VPNLPAAETNTDPSIW S/YG*LASYLVIG**LHWTSSIN GAEVCPHWNRHLRI*VCLS QCFCED/SHPWHIELASYLPSS ST*HCL*SRHSPYS*RSVAVG SWNSLVLPCS*RSS*SSWINKN EWPFEVTITMPTR*QVSAGL SSSEGCVCSEASSNIWYCFSR DSW*QOESRGGGGGTIHHH# PTSKIFASCFLDIMFCW**GC *WRNAATRRINNNFI GPEDLQGLFILSFQDPLLISH CLEALAPPS*PVVPISSFPPH GEFWLYPSGAA/RASSDAQS 37129 B 6811 1 1452 37130 A 6812 122 1838 371310 A 6812 122 1838 37131 A 6813 101 249 MTHVTALRTSSNLMRN*RK* | | | | | 1 | | |
| WRLCMDSATWTSTYQ(A*PC | | l . | | | 1 | | |
| GHC*VPNLPAAETNTDPSIW S7/G*LASYLVIG*LHWTSSIN GAEVCPHWNRHLRI*VCLS QCFCED/SHPWHELASYLVES GAEVCPHWNRHLRI*VCLS QCFCED/SHPWHELASYLPSS ST*HCL*SRHSPYS*FSVAVQ SWNSLVLPCSPSS*SSWINK EWPFEVTITMPTR*QVSAGLL SSSEGCVGSESASNIWYCFSR DSW*QESRGGGGGTHHHH PTSKIFASCFLDIMFCW**GG *WRNAATRRINNNFI GPEDLQGLFILSFQDPLL/SHP CLEALAPPPSPVVPISSPPH GEFWLYPSGAA/RASSDAQS VIAVSPLRGLNSWG 37129 B 6811 1 1452 37130 A 6812 122 1838 371310 A 6811 1249 MTHVTALRTSSNLMRN*RKY | | | | | | | |
| S//G*LASYLVIG*LHWTSSIN GAEVCPHWNRHLLRI*VCLS QCFCED/SHPWHIELASYLPSV ST*HCL*SRHSPYS*RSVAVG SWNSLV4PCSPSS*SSWINN EWPEVTITMPTR*QYSAGLI SSSEGCVCSESASNIWYCFSS DSWVQESRGGSGSGTIHHH PTSKIFASCFLDIMFCWT*GC *WRNAATRRINNNFI GPED/QGLFILSFQDFLUSHF CLEALAPFPSPPVPISSFPPH GEFWLYPSGAA/RASSDAQS VIAVSPLRGLNSWG 37129 | l | | | | | | |
| GAEVCPHWNRHLLRI**VCLS QCFCED/SHPWHE/ASYLPS\ | | | | | | | |
| OCFCED/SHPWIHE/ASYLPS/ ST*HCL*SRHSPYS*RSVAVG SWNSLVLPCSHSS*SSWINRM | | | | | i | | |
| STTHCL*SRHSPYS*RSVAVG SWNSLVLPCSPSS*SSWINKN EWPFEVTITMFTR*QYSAGLA SSSEGCVCSESASNIWYCFSS DSWVQESRGGSGSGTIHHH PTSKIFASCFLDIMFCWT*GC *WRNAATRRINNNFI OPEDLGGLFILSFOPLL/SHF CLEALAPFPSPPVVPISSFPPH GEFWLYPSGAA/RASSDAQS VIAVSPLRGLNSWG 37129 B 6811 1 1452 37130 A 6812 122 1838 37131 A 6813 101 249 MTHVTALRTSSNLMRN*RKY | | | ļ. | | | | |
| SWNSLVLPCSPS\$*SSWINRN | | | | | | | |
| EWPEVTIMPTR*QYSAGLA SSSEGCVCSESASNIW;705 D STILL SSSEGCVCSESASNIW;705 D STILL SSSEGCVCSESASNIW;705 WRNAGTRHINNNFI D STILL STIL | | | 1 | | | | |
| SSSEGCVCSEASNIWYCFS8 DSWVQESRGGGGGTHHHH | | | 1 | | | | |
| DSWYQESRGGGGGTIHHHE PTSKIFASCFLDIMFCWT*GC | ŀ | | 1 | | | | |
| PTSKIFASCFLDIMFCWT*GC | | i i | 1 | | | | |
| \$\frac{\pmu}{\pmu} \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ | | | 1 | | | | |
| 37128 | | | 1 | | | | |
| CLEALAPEPSPVVPISSPPPH GEFWLYPSGAA/RASSDAQS 37129 | | | L_ | | | | |
| GEFWLYPSGAA/RASSDAQS 37129 B 6811 I 1452 | 6760 | 37128 | Α | 6810 | 901 | 1142 | |
| VIAVSPLRGLNSWG | | i i | 1 | | | | |
| 37129 B 6811 I 1452 37130 A 6812 122 1838 37131 A 6813 101 249 MTHVTALRTSSNLMRN*RK* | ĺ | | ı | | | | GEFWLYPSGAA/RASSDAQSW |
| 2 37130 A 6812 122 1838 37131 A 6813 101 249 MTHVTALRTSSNLMRN*RKV | | | | | | | VIAVSPLRGLNSWG |
| 37131 A 6813 101 249 MTHVTALRTSSNLMRN*RKV | 6761 | | _ | | | | |
| | | | | | | | |
| EAKSQQEH*S*QACHLKSRM | 6763 | 37131 | A | 6813 | 101 | 249 | MTHVTALRTSSNLMRN*RKVG |
| | 1 | | | | | 1 | |
| SRLWIN | | | | | | | SRLWIN |
| | 6764 | | | | · | | |
| | 6765 | 37133 | Α | 6815 | 310 | 397 | LTIWQDSNPGSCL*GCSVCAHA |
| | | 1 | | | | 1 | CVGGQHMVCF*PSYSLYLKSE/ |
| /CVGGQHMVCF*PSYSLYLK | | | 1 | | | 1 | PKEGTGRNKDPDLNSQNRKGF |
| | | | | | | | LEQIHFQ |
| PKEGTGRNKDPDLNSQNRKO LEQIHFQ | 6766 | 37134 | Α | 6816 | 1 | 583 | |
| SRLWIN S | 6762 6763 | 37130 37131 37132 | A | 6812 6813 | 101 | 249 1074 | EAKSQQEH*S*QACHLI SRLWIN LTIWQDSNPGSCL*GCS |
| | 6766 | 37134 | A | 6816 | 1 | 583 | |
| PKEGTGRNKDPDLNSQNRKO LEQIHFQ | | | | | | | |

| SEQ ID | ISEO ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X-Unknown, |
|--------|-------------|-----|--------------|-------------------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 6767 | 37135 | A | 6817 | h | 486 | |
| 6768 | 37136 | A | 6818 | 2 | 1001 | |
| 6769 | 37137 | Α | 6819 | 1 | 2307 | |
| 6770 | 37138 | Α | 6820 | 3 | 393 | |
| 6771 | 37139 | Α | 6821 | I | 1776 | |
| 6772 | 37140 | Α | 6822 | 1 | 1140 | |
| 6773 | 37141 | Α | 6823 | 1 | 558 | |
| 6774 | 37142 | Α | 6824 | 2 | 798 | PRVRIFFSITWYSLRVLTEISLW |
| | | | | | | GGLILVVIITIQYDMTRTRNKYL |
| | | | | | | HTNSLVALANMSAQFR\SLHQY |
| | | | | | | AA\QRIIRLFSLLSKKHNKVLEQ |
| | | | | | | ATOSLRGSLSSNDVPLPDYAOD |
| | | | | | | LNVIEEVIRMML\EIINSCL\TNS |
| | | | | | | LHHNPNLGITPWLLO\RRSLWN |
| | | | | | | NFR\THPSFQGINGKILIWVIF/LS |
| | | | | | 1 | /SRLOGLAGKLGAELSVERVLEI |
| | | | | | | IKQGVR\SLPKDRLKKFPELKFK |
| | | | | l | | YVEEEOPEEFFIPYVWSLVYNF |
| | | | | | | SSRPVLGIPQDIPAVSPWVSD |
| 6775 | 37143 | Α | 6825 | 3 | 206 | PSASRPA WHAPALHPSPVPARG |
| 0775 | 57143 | ^ | 0023 | ľ | 200 | WOPPTGLHPLREORGLGOHM* |
| | | | | | | QSSGQQPQGGVGPGSHFPGAL |
| | | | | | | WAOL |
| 6776 | 37144 | A | 6826 | 200 | 601 | EMGSCDOWORPCVPWEAVVM |
| 10770 | 37144 | ^ | 0020 | 200 | 100, | PRDP/LKMALAVVWPKMKAPR |
| | | | | ŀ | | VTKRTP*LTSTHQLAGLTSSISE |
| | | | | | | SLA*MRHSPGKTKMKQAARPP |
| | ļ | | | | | MTEITLPMSGMKS/VQQQGEQE |
| | | | | | | PDORLOHSPPPLPPHVLLHWHP |
| | | | | | | LVAQPQA |
| 6777 | 37145 | В | 6827 | 25 | 1407 | EVAQIQA |
| 6778 | 37146 | A | 6828 | 1786 | 1795 | HC*LNALPSGETWGOKRGLPG |
| 0,,,0 | 27110 | | | 1,,,, | | TQLPLPL/VPLRAPKGRSPKGSK |
| | | | | | | GPTHHTWALSSFSLTPSQVTVG |
| | | | | | | TEDOATSASGRPWLRIGTGPGG |
| | | | | 1 | | GRVWAGRDS\RGVPALTVLHV |
| | | | | i | | LSSLGRETP*RPCLRGPTAPAGP |
| | | | | | | KRAPGKWLPWSQAPPCGCCPR |
| | | | | | | *LSHVL*DRNRCAW*KGGGRG |
| | | | | - | | L/LRAPTPVPELAPHPCGPAPTL |
| | | 1 | Ì | | | SKPLSSPNMPAOGLTOE*PGSV |
| | | 1 | | | | ANLPPYGPALLCLGRREWDER |
| | | 1 | l | 1 | | |
| | | 1 | | 1 | | GQVG*VPTESEME*RRTEPLKT PGDCSAAASKIPSFFSNRTPFPPL |
| | | 1 | | | | CPHKNKLKGT |
| (770 | 27147 | ļ | 6920 | | 211 | CPHKNKLKGI |
| 6779 | 37147 | A | 6829 6830 | 1 | 311 402 | |
| | 37148 | Α | | 1 | | |
| 6781 | 37149 | A | 6831 | 1 | 750 | |
| 6782 | 37150 | C | 6832 | 130 | 450 | |

| SEO ID | ISEO ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|-------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 6783 | 37151 | A | 6833 | ı | 875 | MRLLRLKLKVEQHVELYQKYS |
| | | 1 | | 1 | | NNSWRYLSNRLLAPSDSPEWLS |
| | | | | İ | | FDVTGVVRQW/VWSRGGEIEGF |
| | | | | | | RLSA\HCSCDSRDNTLOVDINGF |
| | | | l | l | | TTGRRGDLATIHGMNRPFLLFM |
| | | ļ | i | | | ATPLERAOHLOSSRHRRALDTK |
| | | | | l | | YCFS\STEKNCCVRQLYIDFRKD |
| | i | | l | | | LGWK\WIHE\PKGYHANFCLGP |
| | | | | | | CPYIWSLDTQYSKVLALYNQH |
| | | | | | | NPGASAAPCCVPOALEPLPIVY |
| | | | | | | YVGRKPKVEQLSNMIVRSCKC |
| | | | ļ | | | NLGPAPPRPAPAGPAPPRPAPV |
| | | | | | | ALPMGAVFKDTRAPSPPGAPLK |
| | 1 | | | | | MERGKKKKK |
| 6784 | 37152 | В | 6834 | 162 | 635 | |
| 6785 | 37153 | A | 6835 | 2 | 1846 | |
| 6786 | 37154 | Α | 6836 | 322 | 2104 | |
| 6787 | 37155 | Α | 6837 | 1 | 352 | |
| 6788 | 37156 | В | 6838 | 92 | 1774 | |
| 6789 | 37157 | Α | 6839 | 260 | 1016 | |
| 6790 | 37158 | Α | 6840 | 479 | 1937 | DVEHVGKMRRRWRRRVVVAD |
| 1 | | | | | ł | GNVVKPMSCAGDLQ/PFTRVTV |
| | | | | | | HWGKGNDQTFQDLLDTGSELT |
| | | | | l | | LIPGDPKRHCGPPVKIGAYGGQI |
| | | | | l | | INGVLAQVQLTVDAVGPWTHP |
| | | | ŀ | | | VVIFPVPECIIGIDMLSSRQNPHT |
| | | | | | | GSLTGRVWTIMVRKAKWKPLE |
| | | | | | | LPLPRKIVNQKQYHIPEGIVEIS |
| | | | | | | ATIKDLKDAGVVIPTTSPFNSPI |
| | | | | | | WPVQKTDGSWRMTVGYCKLN |
| | | | | | | QVVTPIAAAVPDVVSLLEQINT |
| | | | | | | PPGTWYAAIDLANDF |
| 6791 | 37159 | В | 6841 | 20 | 26 | |
| 6792 | 37160 | В | 6842 | 2 | 207 | |
| 6793 | 37161 | В | 6843 | 187 | 405 | |
| 6794 | 37162 | Α | 6844 | 451 | 770 | LFLFLLSSHPRRSSASWYRHRH |
| | | 1 | | | | PHHPSAARLPVADSASSSSSPSS |
| | | l | | | 1 | SSPSPSSSSSSSSSPPSSSSFVYPHC |
| 1 | | l | | | | QPPAPHFPH*HSR*QGRLFHFLP |
| | | | | | | LPQLPSSPLSPWW |
| 6795 | 37163 | Α | 6845 | 1 | 417 | |
| 6796 | 37164 | Α | 6846 | 191 | 314 | |
| 6797 | 37165 | Α | 6847 | 129 | 212 | |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|---|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | |
| | sequence | 1 | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 6798 | 37166 | Α | 6848 | 1 | 192 | CALNAGL/IGENEAKKRRSKVT |
| | | ŀ | | | | QEADFPGSMDGASNFVRGDAI |
| | | l | | | | AGILIMVINIVGGLLVGVLQHG |
| | | | | | | MSMGHAAESYALLTIGDGLVA |
| | l | 1 | l | l | | QIPALVISTAAGVIVTRVSTDQD |
| | l | | | l | | VGEQMVNQLFSNPSVMLLSAA |
| ŀ | | | | l | ŀ | VLGLLGLVPGMPSLVFLLFTAG |
| | | 1 | | | | LLGLAWWIRGREQKAPAEPKP |
| | | 1 | | ł | | VKMAENNTVVEATWNDVQLE |
| | | | | | | DSLGMATGLLT*PIFRAQWTGQ |
| | | l | | | | VTLFAAMPSPGSSSWSLTLSAG |
| | | _ | | | | CWSACCNMA |
| 6799 | 37167 | В | 6849 | 65 | 1129 | |
| 6800 | 37168 | В | 6850 | 46 | 1038 | |
| 6801 | 37169 | Α | 685I | 2 | 413 | PSFQGPVSLPSITVVSIDSQASKP |
| | | l | | | | LKTPQLWCQLRQYSFKHSFLV |
| | | l | | | | VPTCPVPLLG*DTLTKLSASLTI |
| | | l | | | | PGLQPHLIATHLNPQVEDTSIPS |
| | | 1 | | | | LATYHAPLTISLKPNHPYPSQC |
| | | _ | | | | QYPIPQHALKGLKPVITHLLQH |
| 6802 | 37170 | C | 6852 | 35 | 346 | |
| 6803 | 37171 | С | 6853 | 239 | 484 | |
| 6804 | 37172 | A | 6854 | 1 | 1020 | |
| 6805 | 37173 | A | 6855 | 3 | 131 956 | LA CALLED AND DECAME |
| 6806 | 37174 | A | 6856 | 1 | 956 | MAGALPPASLPPCSLISDCCASN |
| | l . | 1 | | l | | ERSSMGIGPSEPCAGYNLLVCR |
| | | 1 | | | | LTKKKRIRSTNKVWDYVKRPN |
| | | 1 | | ŀ | | LRIIGVPEEEENSKSCENILGEIE |
| | | ı | | | | ENFPSLATDLDIQIQEAQRTPQK FITERSLPRYIVIRLSKVKTKERI |
| | | l | | | | LRAVROKHQIFLTORLKTNTAQ |
| | | l | | | | SPOKLPGPSOTLLVTLTREITIVP |
| | | l | | | | GLDFNPASHIIADTTPDPHDCIS |
| | 1 | l | | | | LIHLTFIOFPHISFFPVPHPDHTW |
| l | | l | | | 1 | FINGSSTRPNRHSPAKAGYAIVS |
| | | l | | | | STSIIEATTLPSSTTSQQAEFIAL |
| | 1 | 1 | | ł | | TOALILAKGLCINIYADSKY/AF |
| | | | | | | HILHHHAVIWAERDTETG |
| 6807 | 37175 | A | 6857 | 1 | 1269 | III EIIIIIA VIWAERDIFIO |
| 6808 | 37176 | A | 6858 | 1 | 741 | |
| 6809 | 37176 | B | 6859 | 411 | 1257 | |
| 0009 | 12/1// | 10 | 0039 | [711 | 1631 | L |

| SEQ ID | SEQ ID NO: | | SEQ ID NO: | | Nucleotide location of last | |
|--------|------------|-----|------------|-------------------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 6810 | 37178 | A | 6860 | 438 | 3997 | SPLPHSTPISHPAACFKKIKACY |
| | | | | | | HLPATAWPFKAYKLSLQFPHFT |
| | | | | | | CPKTRQGLQHNSHKNTRALPD |
| | | | | | | YRLRLISQTPIPSTKQQLLSFLG |
| | | | | | | MVSKVRILTQELGPRPIAFLSKQ |
| | ŀ | 1 | | | | LDLTVLTQPSCLHAAAAAALIL |
| | | ĺ | | | | LKALKITKYAQLTLYSSHNFQN |
| | | l | | | | LFSSSYLMHILSAPWLLQLYSLF |
| | | | | | | VESPTITIVPGTDFNPASHIILDT |
| | | 1 | | | | TPDPHDCISLIHLTFTPFPRISFFP |
| | | 1 | | | i . | VPHPNHIWFIDGSSTRPKCHSPA |
| | 1 | l | 1 | | 1 | KAGY |
| 6811 | 37179 | Α | 6861 | 245 | 505 | |
| 6812 | 37180 | A | 6862 | 346 | 522 | PAPEFWVHG*NVSPLSL*SKEQ |
| i | | ı | | | | EDRGFISQGRSPDLSHGTKFHV |
| | | | | | | RPCEETTKQALCEQH |
| 6813 | 37181 | Α | 6863 | 3 | 879 | SGDLPWEINPPSSYTLLCEKDPP |
| | | | | | | TTSGPQTNQPKKH\LTNFKSETK |
| | | l | | | | ETRFIRGPTTPAPVTDWEGSLPL |
| | | l | | | | VFNHSRDTSLIIHPGFRGVRPRR |
| | | l | | | | DACLGPSPLAASPTFLGKGPAA |
| | ł | | | | | PRQTELGPNSSSASAPPPYNPFI |
| 1 | | 1 | | | | ASPPHTWSGLQFPSMTSPPPPA |
| | | l | | | | OOFTLKKVAGAKGIVKDLINLT |
| | | l | | | | FKVYNNRKKLOFLASTVROTP |
| | | | | | | ATSPAHKNFOTPELOOPGVPPE |
| | | | | | | PPPRGACYKFQKSGHRAKECLQ |
| | | | | | | PRIPPKPHPICVGPHWKSDCPTH |
| | | | | | | LAATPRAPGTLAQGSLTPSQIFL |
| 6814 | 37182 | Α | 6864 | 143 | 331 | DTSTPSLVTDHASLTISLKPNHF |
| | | | | | | YPD*COYPIPOHALKGLKPVITC |
| | | | | | | LLQHGLLKPINSPYPRA |
| 6815 | 37183 | Α | 6865 | 1 | 783 | |
| 6816 | 37184 | A | 6866 | 32 | 415 | WRHALKGLKPVITRLLQHGLL |
| l | | 1 | | 1 | i | RPINSPYNSPFLLVLEPDKPYRK |
| | | l | | | 1 | RK*ISPPNRHILASVEVLKNQVN |
| | | 1 | | 1 | | SHEFERSALIHTLTSGLAPCSLH |
| | | 1 | | | 1 | KMCSKLPRSFLSVGSGTGKEAR |
| | 1 | l | | 1 | I | SKILTFRTASRHLVL |

| SEO ID | SEQ ID NO: | Met | SEQ ID NO: | Nuclcotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------------|----------------|----------------|--------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | scquence | | |
| 6817 | 37185 | Α | 6867 | 1 | 1374 | MSELPFTIASKRIKYLGIQLTRD |
| | | | | | | VKDLFKENYKPLLKEIKEDTNK |
| | | ŀ | | İ | | WKNIPCSWVGRINIVKMAILPK |
| | | | | | | VIYRFNAIPIKLPMTFFTELEKTI |
| | | | | | | LKFIWNQKRARIAKSILSQKNK |
| | 1 | | | | | AGGITLPDFKLYYKPTETKTAW |
| 1 | | | | | | YWYLNRDIDQWNRTEPSEITPH |
| | | 1 | | | | TYNYLIFDKPEKNKQWGKDSL |
| | 1 | | | | | FNKWCWENWLAICRKLKLDPF |
| | | | | | | FTPYTKINSRWIKDLNVRPETIK |
| | | | | | | TLEENLGITIQDIGVGKDFMSKT |
| | | 1 | | | | PKAMATKDKTGKWDLIKLKSF |
| | i | l | | | | CTAKETTIRVNRQRVAALLNSA |
| | 1 | | | | | VFONAVEVVVWPSSEVHVKFL |
| | 1 | | | | 1 | FCKIISCAGQKQPIKFDGSSSLS |
| | | | | | İ | GVATAMMSATIAHLKRIKACY |
| | | | | | | RSPVTAWTFKAYKLSLQFPHFT |
| | | | | | | CPKTGQALQ*HT*KGLKPVIAH |
| | | | | | | LLQHGLLKPINSPYNSLILPVQK |
| 1 | | | | | | PDKPYRKLESFTSKAIKWHQIPS |
| 1 | | | | | | \PGKHLC**GS*RSPVTAWTFKA |
| | | | | | | YKLSLQFPHFTCPKTGQALQEA |
| | | | | | | GVIHFKGHOMASDPITOGNTYA |
| | | | | 1 | | NKVAKEAASVLTSVPHGQFFSF |
| | | | | | | SSVTPTYFPTEIDFTYMPQVRKL |
| | | | | 1 | | KHLMV |
| 6818 | 37186 | Α | 6868 | 122 | 281 | |
| 6819 | 37187 | Α | 6869 | 2 | 2144 | |
| 6820 | 37188 | A | 6870 | 224 | 418 | LSQWRHALKGLKSVITRLL*HG |
| } | | 1 | 1 | | | LLKPINSPYNSPIVPVLKPDKTY |
| L | | _ | | | | RKVESFTAKTIKRCQIPLL |
| 6821 6822 | 37189 37190 | A A | 6871 6872 | 5 | 289 2205 | |
| 6823 | 37191 | l c | 6873 | i | 2082 | |
| 6824 | 37192 | В | 6874 | i - | 1614 | |
| 6825 | 37193 | A | 6875 | i - | 2067 | |
| 6826 | 37194 | A | 6876 | i | 1152 | |
| 6827 | 37195 | A | 6877 | i | 798 | |
| 6828 | 37196 | c | 6878 | 488 | 788 | |
| 6829 | 37197 | Ā | 6879 | 90 | 765 | NTVFGLVVLPLELKLRIFRLLD |
| 002) | | Ι. | 10075 | 1 | 1 | VRSVLSLSAVCRDLFTASNDPL |
| | | 1 | | | | LWRFLYLRDFRGDFRNDIYSWT |
| | | 1 | 1 | | | TKDFEYYINLVDKTEARFEKVD |
| | 1 | 1 | | | ! | SDFESFTVGKMPSNSIACTEKSF |
| | | 1 | | | | MKGRVSQCDKKPVITRLLQHG |
| | 1 | 1 | 1 | | | LLKPINSPYNSPILPVLKPDKPY |
| 1 | 1 | 1 | 1 | | l | KLVQDLHRINQIVLPIHPCGAQP |
| | | | | | | HTLFCPQYLPPQLTIPVPDLKDA |
| | 1 | 1 | | | 1 | FFTIPLQPSSQ\PLFAFT*TDPDT |
| | | | | | L | ITTITEQL 33QUEFAFT TOPDI |

| SEQ ID | SEQ 1D NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino aeid sequence (X-Unknown, |
|--------|------------|-----|------------|-------------------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 6830 | 37198 | A | 6880 | 1824 | 2286 | PRVLRPNSPRNISPISNRIFSD*R |
| | | | | | | CPIASEASWTITDALG/RLLOWR |
| | | | | | | HGLLNPINSPYNSPILPVOKPDK |
| ŀ | | | | | | PYRLVOALLSLPOLPLFLAWTSI |
| l | | | | İ | | WPPTLFRITLLNPMTVSL*ST*H |
| | | | | | | SLHFPMFPSFLFLTLITLGLLMA |
| | | | | | | VPLGLIATHQQRRAML |
| 6831 | 37199 | A | 6881 | 930 | 1289 | LSOWTDGLLKPMNSPYNSPILP |
| | | | | | | VLKPDKPYK*VODLRLINOIVL |
| | | l | l | | | PIHPVV\PNPYTLLSSIPPSTTHY |
| | | 1 | | | | SVLDLKLAFFTIPLHPSSOPFFAF |
| | | i | | | | TWTDPDTHQAQQIT*AVLPQSF |
| | | 1 | | | | SDSPHE |
| 6832 | 37200 | Α | 6882 | 2 | 196 | IHGCKFIQCKRILSNFTEVADHV |
| 1 | | | | | | HDQIRL*TGIRLLTQPQPRLSCR |
| 1 | | | | | | HQVAQHSVCRYLCQLPLL |
| 6833 | 37201 | Α | 6883 | 2 | 1441 | LNQEEGESLNRPITGSEIEAIINS |
| | | | | | | LPTKKSPGPDGITAEFYQRYKE |
| | | | | | | ELVPFLVKLFQSTEKEGILPNSF |
| | | l | | | | YEASIILIPKPGRDTTKKENFRPI |
| | l . | l | | | | SLMNIDAKILNKILANRIQQHIK |
| | | 1 | | | | KLIHNGQHINRTNDKSHIIISIDA |
| | | 1 | ł | | | EKTFGKIQQPFMLKTLNKLGID |
| 1 | | 1 | | | | GTYLKIIRAIYDKPTANIILTGQ |
| | | 1 | | | | KLEAFPMKTGTREGCPLSPLLF |
| ļ. | | 1 | | | | NIVLEVLARAIRQEKEIKGIQLG |
| | | | | | | KEEVKLSLFADDMIVYLENPIV |
| | | 1 | | | | SAQNLLRLISTFSKVSGYKINVQ |
| | 1 | | | | | KSQAFLYTNNRQTESQILSELPF |
| | | | | | | TIASKRIKYLGIQLTRDVKDLFK |
| | | | | | | ENYKALLNEIKEDINKWKNIPC |
| | | | | | | SWVGRINIVKMAILPKVIYRFN |
| 1 | | | | | | AIPIKLPMTFFTELEKTTLKFIW |
| 1 | 1 | | | | | NQKSARIAKSILSQKNKAGGIM |
| | | | | | | LPDFKLYYKATVTKTAWYWY |
| | | | | | 1 | QNRDIDQWNTTEPSEIMLHIYN |
| | 1 | | 1 | | | Y/LIFNKPEKNKKWGKDSLFNK |
| | | | | | | WCWENWL |

| SEO ID | ISEO ID NO: | Met | SEQ ID NO: | Nucleotide | Nuclcotide location of last | Amino acid sequence (X=Unknown, |
|--------|-------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hed | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 6834 | 37202 | A | 6884 | 69 | 2415 | DKTSRGTIRQQRLRFTNIRCSA. |
| , | | | | | | TAADIQANRVWRGPPANSNRP |
| | | | | | | AA\RVLTVRRKTNKQKGHPHQ |
| | | | | | | KPICTSPSSNTKEIQTTIREYYKI |
| | | | | | | LYANKLENAEERDKFLNIYTLP |
| i | | | | | | RLNQKEVESLNRPITGSEIEAIIK |
| | 1 | | | | | SLPTKKSPGPDGFTAKFYQRYK |
| | | | | | | EELVPFLLKLFQSIEKEGILPNSF |
| | 1 | | | | | YEASIILIPKPGRDTTKKENFRPI |
| | 1 | | | | | SLMNIDARILNKILANLIQQHIK |
| | l | | | | | KLIHHDQVGFIPGMQGWFNICK |
| | | | | | | SINIIQHMNRTKDKNHMIISIDA |
| | | | | | | EKPFDKIQQPFMLKTLNKLDID |
| | | | | | | GTYLKIVRAKYDKPTANIILNG |
| l | | | | | | QKLEAFPLKTGTRQGCPLSPLL |
| | | | | | | FNIVLEVLAREIRQEKEIKGIQL |
| | ŀ | | İ | | | GKEEVKLSLFVDDMIIYLENPIV |
| | l | | | | | SAQNLLKLISNFSKVSGYKISVQ |
| | 1 | | ! | | | KSQAFLYTNNRQTESQTMSELP |
| | | | | | | FTIASKRIKYLGIQLTRDVKDRF |
| | | | | | | KENYKSLLSEIKEDTNKWKNIP |
| | | | | | | CSWVGRINIVKMAILPKVIYRF |
| | | | l | | | NAIPIKLPMTFFTELEKTTLKFIR |
| | 1 | | | | | NQKRARIAKSILSQKNKAGGIT |
| | | | | | | LLDFKLYYKATVTKTAWYWY |
| | | | 1 | | | QNRHVDQWNRTEPSEIMLHIY |
| | | | | | | NYLIFEKPDINKQWGKDSLFNK |
| | 1 | | | | | WCWENWLAICRKLKLDPFLTS |
| | 1 | | 1 | | | YTKINSRWIKDLNVRPKTIKTLE |
| | 1 | | l | | 1 | ENLGNTIQDIGMGKDFMSKTPK |
| | 1 | | | | | AMATKAKLDKWDLIKLKSFCT |
| | | | | | | AKETTIRVNRQPTGWEKIFATY |
| 6835 | 37203 | Α | 6885 | 1 | 2358 | |
| 6836 | 37204 | В | 6886 | J | 1443 | |

| SEQ ID NO: | SEQ ID NO: of peptide sequence | Met hod | SEQ ID NO: in USSN 09/540,217 | Nucleotide location of first codon for peptide sequence | Nucleotide location of last endnn for last amino acid of peptide sequence | Amino acid sequence (X=Unknown. *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
|---------------|--------------------------------------|------------|-------------------------------------|--|---|---|
| 6837 | 37205 | A | 6887 | | 2913 | KMGLAREWILRFLVLILQEIRS MRQKENKDIQOLNSALHQADL IDIYRTLHRKSTEVTFFSAPHCI/ RTYSKIOHTI.GSKALLSKCKITE IITDSQTTVLSELRIKKLTQNRS ATWKLMMILMDYWVHNEMK AEIKMFFETTNENDTTYQNLW DTFKAVCRGKFIALNAHRKY ERSKIDTLMSQLKELEKQEQTH SKVSRRPIPSSEIEAIINSLPTKKS ERSKIDTLMSQLKELEKQEQTH SKVSRRPIPSSEIEAIINSLPTKKS ERSKIDTLMSQLKELEKQEQTH SKVSRRPIPSSEIEAIINSLPTKKS ERSKUSTRNFISSEIEAIINSLPTKKS HOFBOTTSTEENERPISLAMIDA KILNKILANRIQQHIKKLLHHD VGFIPGMGGWFNICKSINVIQHI MRTSDKNHTIISIDAEKAFNKIQ QLFMLKTLNKLGTTNGMYLKIU RAIPGREGEGIQLIGKEEVKLSL KTGTRQGCPLSPLLFNIVLEVLA RAIPGREGIQGIGKEEVKLSL SNFSKVSGYKINLQKSQAFLYT NNRQTESQIMSELPFTTASKRIK YLGIQLTRDVKDLFKENYKPLL NEIKEDTNKWENIPCSWYGRIN IKKMALIPKYTYRFNAIPIKLPM |
| | | | | | | TFFTELEKTILKFRWNQKRAHI AKTILSQKNKAGGIRLPDFKLF YKATVTKTARYWYENRDIDQ WNRTEPLEIMPHIYNHLIFDKPD KNKQWGKDSLFNKWCWENWL |
| 6838 | 37206 | A | 6888 | I | 1677 | AICRKLKLDPFLTSYTKINSRWI |

| SEQ ID NO: | SEQ ID NO: of peptide sequence | Met | in USSN 09/540,217 | Nucleotide location of first codon for peptide sequence | codon for last amino acid of peptide sequence | Amino neid sequence (X=Unknown, *=Stop codon, /=possible nucleotide deletion, \=possible nucleotide insertion) |
|---------------|--------------------------------------|-----|-----------------------|--|--|--|
| 6839 | 37207 | A | 6889 | 2 | 2400 | SMRQKENKDIQDLNSALHQAD LIDIYATLHPKSTEYTFFSAPHCI RTYSKIDHTLGSKALLSKCKIT EHTDSQTTVLSELRIKKLTQINK SATWKLNMLLNDYWVHNEM KAEIKMFETNENKDTTYQNL WDTFKAVCRGKFIALNAHRKR QERSKIDTLMSQLKELEKQEQT HSKVSRRPPSSEIEAIINSLPTK KSPGPDGFTAEFYQRYKEELLY ELKLFQSIEKEGILPNSYEASI LIPKPGRDTTEKENFRPISLMNI DAKILNKILANRIQQHIKKLLIII DAKILNKILANRIQQHIKKLLIII ODAKILNKILANRIQQHIKKLLIII CHARLINGENFOKOMENTISLINGENFOKOME |
| | | | | | | SRWIEDLNVRPKTIETLEENLG |
| 6840 | 37208 | Α | 6890 | 1 | 1515 | |
| 6841 | 37209 | A | 6891 | 1 | 1428 | |

| SEO ID | ISEO ID NO: | Met | ISEO ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown. |
|--------|-------------|-----|-------------|-------------------------------|-----------------------------|--|
| NO: | of peptide | | in USSN | location of first | | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | eodon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 6842 | 37210 | A | 6892 | 150 | 1920 | NYQCREVLKGPDGAENHGTRT |
| | 1 | | | | | T*RMHK\LSSQFSQLEERVSGM |
| | 1 | | | | | EDQTNETKDTHRLKIKGWRKIY |
| | | | | | | QANGKQKKAEAAILVLDKTDF |
| | | | | | | KPTKIKGDKQGHYIMVKGSIQQ |
| | | | | | 1 | GQLTILNIYAPNTGASRLIKQVL |
| | | | | | | RDLQRDLDSHTIIMGDFNTRLS |
| | 1 | | | 1 | | TLDRSTRQRLNKDIQELNSALH |
| | | | | | | QVDLIDIYRILHTKSTEYTFFSA |
| | | | | 1 | Ì | PHHTYSKIDHTVGSKALLSKGK |
| | | | | | | RTEIITNRLSDHSAIKLELRIKEL |
| | | | | 1 | | TQNRSTTWKLNNLLLNDYWNL |
| | | | | | | WDTFKAVCRGKFIALNIQKRK |
| | | | | | | QERSKIDTLTSQFKELEKQEQT |
| | | | | | | HSKASRRQEITKIRAELKERETQ |
| | | | | | | KSLQKISESRSWFFEKINNIDTP |
| | | | | 1 | | LARLIKKKREKNQIDTIKNDKG |
| | i i | | | | | DITTDPTEIQTTIRQYYKHLYAN |
| | | | | | | KQENLEEMNKFLDTYTLPRLN |
| | | | | | | WEEAESLNRPITGSEFEAIINSLP |
| | | ı | | 1 | | IKKSPGPDGFTAKFYQSYKEEL |
| | | | | | | VPFLLKLFQSIEKEGILPNSFYE |
| | | | | | | ASIILIPKPGRDTTKKDNFRPISL |
| | | | | 1 | | MNIDAKILNKILANKIQQHSKK |
| | | | | 1 | | LIHHNQVGFIPGMQGWFNTCKS |
| | | | | | | INIIQHINRTKDKNHMIISIDAEK |
| | | | | l | | AFDKIQQPSC |
| 6843 | 37211 | Α | 6893 | 1 | 1797 | |

793

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | <i></i> |
| 6844 | 37212 | A | 6894 | 2 | 1880 | APNTGAPRFIKQVLSDLQRDLD |
| | | 1 | | | | SHTIIMGDFNTPLSTLDRSMRO |
| | | 1 | | | | KVNKDIQELNSALHQADLIDIY |
| l | | l | | l | | RTLHPKSTEYTFFSATHHTYSKI |
| | | 1 | l | | | DHIVGSKALLSKCKRTEIITNCL |
| l | | | | l | | SDHSAIKLELRIKKLTENRSTTW |
| | | 1 | | | | KLNNLLLNDYWVHNEMKAEIK |
| | | 1 | | ŀ | | MVFETNDTLPRLNQEEVESLNR |
| | | 1 | | | | PKTGSEIEAIINSLPTKKSPGPDG |
| | 1 | 1 | | | | FTAEFYQRYKEELVPFLLKLFQ |
| | 1 | 1 | | ŀ | ł | SIEKERILPNSFYEASIILIPKPGR |
| | | | | | | DTTKK/EENFRPISLMNIDAKIL |
| | | ļ. | | | | |
| | | | | | 1 | NKILANRIQQHIKKLIHHDQLGF |
| | | | | | ł | IPGMQGWFNICKSMNVIQHINS |
| | | | | | | PKDKNHMIISVDAEKAFDKIQQ |
| ļ | | ŀ | | 1 | 1 | PFMLKTLNKLGIDGTYLKIIRAI |
| l | | l | | | | YDKPTASIILNGQKLEAFTLKTG |
| | 1 | 1 | | | | TRQGCPLSPLLFNIVLEVLARAI |
| 1 | | 1 | | | | RQEKEIKGIQLGKEEVKLSLFA |
| | | | ľ | | ł | DDMIVYLENPIISAQNLLKLIGN |
| ĺ | | 1 | | | | FSKVSGYTINVQKSQAFLYTNN |
| | | 1 | | | 1 | RQTESQIMSELPFTIASKRIKYL |
| | | | ŀ | | | GIQLTRDVKDFFKENYKPLLNE |
| 1 | | 1 | | | | IKEDKNKWKNIPCSWVGRINIV |
| 1 | | 1 | l. | | | KMAIPPKVIYRFNAIPIKLPMTF |
| i | | l | | | i | FGMIFLSQKYGHVTLLFRLLQW |
| | | l | | | | LLNVARNNNKVFYKIYKVGHK |
| | | l | | | | LSSAYVLCLTCSHFSVSFL |
| 6845 | 37213 | В | 6895 | 13 | 1506 | |
| 6846 | 37214 | Α | 6896 | 1 | 6635 | MTPESRDTTDLSPGGTQEMEGI |
| | | 1 | | | 1 | VIVKVEEEDEEDHFQKERNKVE |
| | 1 | ĺ | | | | SSPQVLSRSTTMNERALLSSYL |
| | 1 | l | | | | VAYRVAKEKMAHTAAEKIILP |
| | | ı | | | | ACMDMVRTIFDDKSADKLRTIP |
| | | 1 | | | | LSDNTISRRICTIAKHLEAMLIT |
| | | l | | | | RLOSGIDFAIQLDESTDIASCPTL |
| | | l | | | | LVYVRYIPLKLRLGGLLQPEKPI |
| | | | l | l | | VLKVESRDGTIQYNSQQHINLS |
| 1 | | 1 | 1 | l | l | AAWLKTAVOGREAPGKOPSKO |
| | | i i | | 1 | 1 | QHSAKRKTHRTQLKKESGDGP |
| | | l | | 1 | | HPKFGGGNLASP |
| 6847 | 37215 | В | 6897 | 1 | 3045 | |
| 004/ | 121213 | ь | 0077 | 11 | 2042 | |

| SEQ ID | SEQ ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|-----|------------|-------------------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide sequence | of peptide sequence | deletion, \=possible nucleotide insertion) |
| 6848 | 37216 | A | 6898 | 1 | 2764 | MARELHDKCTSFSSRFDOLEES |
| 0848 | 3/210 | l^ | 0898 | 1' | 2704 | |
| | | 1 | ļ | | l | LSAMEDQMNEMMREEKFREK |
| ļ. | 1 | | | | | RRKRNEQSLQEIWDYVKRPNL |
| ļ | | | | | | HLIGVPESDRENGPKLENTLQDI |
| l | | | | | | IQENFPNLARQGNIQIQEIQRMP |
| | | | | | l | QRYSSRRATPRHIIVRFTKVEM |
| | | | | | | KEKMLRAAREKEIQTTIREYYK |
| 1 | | | | | | HFYANELENLEEMDKFFETYTL |
| | i i | 1 | | | | PRLNQEEVESLNRPITGSAIEAII |
| | i . | | | 1 | I | NSLPTKKSPGPDGFTAEFYQRY |
| | l . | | | | | KEELVPFLLKLFQSIEKEGILPNS |
| | | | | | | FHEASIILIP |
| 6849 | 37217 | В | 6899 | 1 | 3549 | |
| 6850 | 37218 | Α | 6900 | 387 | 541 | |
| 6851 | 37219 | A | 1090 | 1 | 545 | |
| 6852 | 37220 | A | 6902 | 71 | 370 | RRCKVRPSARGVLRYAVCVCV |
| 1 | 1 | | | | | CVCVYPCVHVCTCVRMCLCVC |
| 1 | 1 | | | | | VCVCE/CSVEIHCGGQGCARCIC |
| l | | | | | | LQPQEGGCTEQAVALHCAAQL |
| | | | | | | WRNRLKLMKQPVARV |
| 6853 | 37221 | Α | 6904 | 1 | 738 | |
| 6854 | 37222 | Α | 6905 | 1 | 567 | |
| 6855 | 37223 | Α | 6906 | 1 | 1416 | |
| 6856 | 37224 | Α | 6907 | 3 | 1267 | |
| 6857 | 37225 | Α | 6908 | 1 | 552 | NALPGRKSRVFSGCVSADTWK |
| 1 | | | | | i | PPSSAKVTETKGASPAFLRAGQ |
| | | | | | | PRLVPGETLEKSLGPGKDPQVE |
| | 1 | | | | I | PQHPVHLPGISSEGFPWDGFNE |
| | | | | | l | QTPKD\LPNRDGGAWVLGYRA |
| | | | | | i | GPACPFLLHEEREKSNRSELYL |
| | | | | | ŀ | DLHPDHSLTEQDDRTPGRLQA |
| | | 1 | | | ŀ | VWPPPKTKDTEEKVGLKYTEA |
| | | 1 | | | ŀ | EYQAAILHLKRE |
| 6858 | 37226 | Α | 6909 | 1 | 561 | |
| 6859 | 37227 | Α | 6910 | 219 | 1343 | RRLCHTQPTLGMRERSELVNV |
| | | 1 | | | | CVHSVFSLPSVQAMQEKDEAK |
| | | | | | | AETIQALYHQTLEALQTLLKAL |
| 1 | | | | 1 | | FIEDPTPAGLKSILEALGPWMNS |
| | | | | | | GKAHERARAVNTNVSVLNHM |
| ł | | | | | | LLTLPFFMPLGFPALGLLLGRLI |
| | 1 | 1 | | | | LHIGDPDEEIGCEALDGIIILYTI |
| | | | | | | LELOKRARDKEETNKKELYES |
| i | 1 | | | | | NKHFLGPYNPVSPCONILRVIEE |
| 1 | 1 | | | | | FGDFLGPQQIKDLLLAALEGLK |
| | | | | | | GSSEAPGKDSREMMQLASEVM |
| | 1 | | | | | LSSVLEWYRHRALEVIPEIMQGI |
| | 1 | 1 | | | 1 | YMOLSHIQEPRARQVALLPVSL |
| ŀ | 1 | | 1 | | | LASSFMTEVVVALLMCPLPLNR |
| | | | 1 | | 1 | QPAACASSCPSTAAWAV*GAST |
| 1 | 1 | | 1 | | | LSCSWPCSFRSITTSASTCLAAW |
| | 1 | 1 | 1 | | | |
| L | 1 | | | l | | LLPRTPRRVHSPLPSYLCAGW |

| SEQ ID | | | SEQ ID NO: | | | Amino acid sequence (X=Unknown, |
|--------|------------------------|----------------|-----------------------|--|--|---|
| NO: | of peptide sequence | hod | in USSN 09/540,217 | location of first coden for peptide | eodon for last amino acid of peptide sequence | *=Stop endnn, /=possible nucleotide deletion, \=possible nucleotide insertion) |
| | sequence | | 09/340,217 | sequence | or permue sequence | deteron, (-possible interestide insertion) |
| | | | | · | | |
| 6860 | 37228 | Α | 6911 | 3 | 730 | |
| 6861 | 37229 | A | 6912 | 2 | 1218 | ERKCMQGKYAGAMESEPCVCT |
| | | | | | [| EADFDCDYGYERHSNGQCLPA |
| 1 | 1 | | | | İ | FWFNPSSLSKDCSLGQSYLNST |
| | | | | | | GYRKVVSNNCTDGVREQYTAK |
| 1 | | | | | | PQKCPGKAPRGLR\VVTADGKL |
| | 1 | | | | | TA\EQGHNVTLMVQLEEGDVQ |
| | | | | | | RTLIQVDFGDGIAVSYVNLSSM |
| | | | | | l | EDGIKHVYQNVGIFRVTVQALV |
| | | | | | | RLPPHISQCDEVFRFFEARPEDV |
| l | ŀ | | | | | NPPKDQALLLGELGPAVELCLK |
| | | | | | | EERFADAIILAQAGGTDLLKQT |
| l | | l | | | | QERYLAKKKTKISSLLACVVQK |
| | İ | 1 | | | | NWKDVVCTCSLKNWREALAL |
| | l | 1 | | | Ì | LLTYSGTEKFPELCDMLGTRME |
| | | 1 | | | | QEGSRALTSEARLCYVCSGSVE |
| | | l | | | | RLVECWAKCHQALSPMALQD |
| | | l | | | | MHVISTDENQVFAAVQEWNQN |
| l | | l | | | | DTYNLYISDTRGVYFTLALENV |
| | | <u> </u> | | | | QSSRGPEGNIMIDLYEVTI |
| 6862 | 37230 | Α | 6913 | 1 | 1659 | V-0.0144441-5.00.5.00 |
| 6863 | 37231 | A | 6914 | 540 | 824 | KPRLENYVKNAEASGADAINW |
| | 1 | 1 | | | | KKGY/LVMEDEMNEMKREGKF |
| | | l | | | 1 | REKRIKRNEQSLQEIWDYVKDQ IYVRLVYLKVTGRMEPSWKTL |
| | | 1 | | | | CRILSRRTSPI |
| 6864 | 37232 | A | 6915 | 1 | 939 | CRESICUSIT |
| 6865 | 37233 | A | 6916 | 285 | 458 | OVFSOLEGRIALGKFORPSSLPT |
| | | | | | | GKWTQRCWWGAQWE*D*LFG |
| | | | | | | LHGWWVRPVIAGFP |
| 6866 | 37234 | Α | 6917 | 32 | 171 | |
| 6867 | 37235 | Α | 6918 | 294 | 461 | |
| 6868 | 37236 | A | 6919 | 2 | 255 | LIPCPATVNNVSDIMGMYMKE |
| l | | l | | | | CSASLITREMQIRTTIMRHHLTS |
| | | l | | | | IGTEMIRK/SKNNECWSGRECQ |
| | | <u>_</u> | | | | TVGAGQCVRAPCASRSRARH |
| 6869 | 37237 | A | 6920 | 87 | 393 | |
| 6870 | 37238 37239 | B A | 6921 | 78 | 633 | TOYLRWKCRNHRLLRRSCWEL |
| 6871 | 3/239 | I ^A | 0922 | /* | 200 | *TRAVPIRPSWLQNRYQGTSRF |
| | | l | | | | |
| 6872 | 37240 | ١. | 6923 | | 369 | CVCFEESSGTPSTQLEI FVLHEKCLGPFIWTGNTNVEM |
| 6872 | 3 / 240 | A | 6923 | 1 | 309 | |
| | | | | | | VKKICAPT*TKHVVW*LES*M WEEPRWPN\GKAPVYSSOREOR |
| | | | | | | RRRVISAFPSEGVLPSTFKNKKF |
| | 1 | | | | | |
| | | 1 | | | | TVKQPQVGRSVGIPEEGIVIIGD |
| 6972 | 27241 | | 6024 | 1, | 201 | GQLQGCLLPLKTF |
| 6873 | 37241 | A | 6924 | 3 | 201 | LKEMQINTTMRYHS\TPSRTS*\I KKTDNNKFWMRMTEKLETSY |
| 1 | 1 | | | | | |
| | | | | | | CWWECETMQPRWKVSLQYLL PLI |
| | | | L | | L | PLI |

| SEO ID | ISEO ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|-------------|-----|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *-Stop codon, /-possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | 1 | |
| 6874 | 37242 | Α | 6925 | 1 | 2064 | |
| 6875 | 37243 | Α | 6926 | 95 | 752 | |
| 6876 | 37244 | A | 6927 | 2237 | 5072 | RAKSPANIIMTGSNSHITILTLN |
| | | | | | 1 | VNGLNSPIKRHRLASWIKSODP |
| | | i | | | l . | SVCCIQETHLMCRDTHRLKIKG |
| | | | | | | WRKIYOANGKOKKAGVAILVS |
| | 1 | | | | 1 | DKTDFKPTKIKRDKEGHYMMV |
| | | | | | | KGSIQQEELTILNMYAPNTGAP |
| ļ | | 1 | | 1 | 1 | RFIKQVLSDLQRDLDSHTLIMG |
| | | | | | | DFNTPLSTLDRSTROKVNKDTC |
| | 1 | | | | | ELNSALHOADLIDIYRTLHPKST |
| l | | 1 | | | 1 | EYTFFSAPHHSYSKIDHILGSEA |
| ĺ | | 1 | | | | LLSKCKRTEIITNYLSDHSAIKL |
| | | 1 | | | | ELRIKNLTQSR |
| 6877 | 37245 | A | 6928 | 3 | 331 | |
| 6878 | 37246 | Α | 6929 | 364 | 853 | |
| 6879 | 37247 | A | 6930 | 2 | 531 | RPRVRELVGGSAIQALKEWNTT |
| | | 1 | | | | GKLRINH*KRCGSTQHHGSKYA |
| | | 1 | | | | TDKEERPD\ACPLQPQPPQIQNG |
| | | 1 | | | | PMNGCEKDSSSTDSANEKPALI |
| | | 1 | | | | PREKKISILEEPSKALRGVTGPNI |
| | | 1 | | | | EKSAKDLQRCTVSLTRYRVMIK |
| | | | | | | EEVDSSVKKITAAFAELHNCIID |
| | | | | | | KEASLMAEMGTVNEQAMRC |
| 6880 | 37248 | A | 6931 | 1 | 456 | ISILEEPSKALRG\VTEGNRLLQ |
| | | 1 | | | | QKLSLDGNPKPIHGTTERSDGL |
| | | 1 | | | | QWSAEQPCNPSKPKAKTSPVKS |
| | | Į. | | | | NTPAAHLEIKPDELAKKRGPNI |
| | | | | | | EKSVKDLQRCTVSLTRYRVMIK |
| | | | | | | GEVDSSVKNIKAACAEFPICIID |
| | | | | | | KEVSLMAEM\DKVKGRKPW |
| 6881 | 37249 | Α | 6932 | 333 | 964 | |
| 6882 | 37250 | A | 6933 | 240 | 691 | |
| 6883 | 37251 | Α | 6934 | 1 | 2076 | |
| 6884 | 37252 | A | 6935 | 14 | 485 | RRSLESVLSRKLNPF*KATGTSR |
| | | 1 | | | | SESAVWAIIDAVSSPQKRLLDSE |
| | | | | | į. | FIDPLMNKKARISHLTNRVPPTL |
| | | ı | | | į. | NGHLNPTSEKSAAGLPLPPAAA |
| | | 1 | | | | AIPTPPPLPSTYLPISHPPQIADS |
| | | | | | | HSPAAPVQGIQPFLTADQYWLE |
| | | _ | | | | NRYPSQHLSRVTASRARHQT |
| 6885 | 37253 | A | 6936 | 1 | 643 | |
| 6886 | 37254 | В | 6937 | 1 | 408 | |
| 6887 | 37255 | A | 6938 | 2 | 197 | or wit Former property |
| 6888 | 37256 | A | 6939 | 103 | 298 | CLWLFQEEEEEEEEEED*EEE |
| | | | | | | EEE/EEEEEEEEEEEEE |
| 1 | | | l | | | EEEEEEEEEEEEEEEE |
| 1000 | 0.000.0 | ١ | 6040 | 1117 | 200 | FLGHRVGI |
| 6889 | 37257 | Α | 6940 | 117 | 257 | L |

| SEO ID | SEO ID NO: | Met | SEQ ID NO: | Nucleotide | Nucleotide location of last | Amino acid sequence (X=Unknown, |
|--------|------------|----------|------------|-------------------|-----------------------------|--|
| NO: | of peptide | hod | in USSN | location of first | codon for last amino acid | *=Stop codon, /=possible nucleotide |
| | sequence | | 09/540,217 | codon for peptide | of peptide sequence | deletion, \=possible nucleotide insertion) |
| | | | | sequence | | |
| 6890 | 37258 | Α | 6941 | 46 | 219 | LKECNCIVCNSKNKCLKG*KKK |
| | | | | | } | EEEEEEEEEEEEEEEE |
| | | 1 | | | | EEEEEEEEEGRRGRGRGRRR |
| | | | | | | RRRRRRKKK |
| 6891 | 37259 | Α | 6942 | 1 | 1314 | MVSRIWSWISEAQCPLCRPSGT |
| | | | | | | YGPGEAALLLWLCIEAAAAAA |
| | | | | | | AARSTTTPIITNHQSNTIAEQNP |
| | | l | | | | PRHENGDPKTYIIHVLAEQVLE |
| | | 1 | | | | RLPHGVALRHDPLAPVVSRAG |
| | | 1 | | | | GVGHQRCAADDALQPLLQGRP |
| | | l | | | | EPGLAERHGVQDNLILKVSHTH |
| | | 1 | | | | TOKSAEKRAVSDPSSTVHRPOP |
| | | | | | | LPPSTVHQSTIPSNPDSSSAYCL |
| | | 1 | | | | PSTRHGFSSYTDSFVPPSGPSNP |
| | | | | | | MNPTIGNGLSPQRVHYQHLPTH |
| 1 | | 1 | | | | AGGKRNAALEYGVPRKYYHM |
| | | 1 | | | | LKITASDYEKTKPFQVGDKVM |
| | | | | | | GSGWRKVGMQT*FL*LKKEEE |
| | | | | | ì | EEREEEE\EEEEEEEEEEE |
| | | | | | | EEEEEEEEEEEEEEE |
| | | 1 | | | | EEEEENSLSLTE |
| 6892 | 37260 | Α | 6943 | 1 | 160 | |
| 6893 | 37261 | A | 6944 | 1 | 306 | |
| 6894 | 37262 | Α | 6945 | 1 | 933 | MWLARELEESLAVSLQGEPGL |
| | | ı | | | | LAGAGRLQGSPFSHPMEPGRQS |
| | | | | | | ETLSQKKKKKEEEEEEEEEE |
| | | l | | | | EEEEEEEEEEEEE |
| | | | | | | EEEEEEEEEEEEEEEE |
| | | ı | | | | DQLDTM\FGTHQQTSPTQRSAR |
| | | l | | | | RRPCSVQGPRS*SPFSHPMEPGR |
| | | l | | | | QSETLSQKKKKKEEEEEEEEE |
| | | ı | | | | EEEEEEEEEEEEEE |
| | | | | | 1 | EEEEEEEEEEEEEEE |
| | | | | | i | EEDQLDTMLWDSSTNLTNTAL |
| | | | | | | SKEKTMFSSRAKIVKPNGEKPD |
| | | | 1 | | | EFESGISQALLELEMNLDLKAQ |
| | | 1 | | | | LWELNITAAKEIEVGGGRKAIII |
| | | 1 | | | | FVPVPQLKSFQKTQVQLRRILP |
| | | | | | | KPTQKSCTNNKQKLPRSCTLTA |
| | | l | | | | VHDAILEDLVFPSEIVGKRIHVK |
| | | l | | | | LDGSHLIKIHLDEAQQNNVEHK |
| | | <u> </u> | | | | VEPFSGVYKKLMGKDVNFEFP |
| 6895 | 37263 | A | 6946 | 1 | 1365 | |
| 6896 | 37264 | Α | 6947. | 416 | 610 | EFKKPVLEGGA*RGEGGSPCV |
| | | | 1 | 1 | | WSFFDPVHFNYQAGLFRVALP |
| | | <u> </u> | | | | GEQCRTGRLVARVYTGISGASF |
| 6897 | 37265 | A | 6948 | 1 | 846 | |

| 6898 37266 | SEQ ID NO: | SEQ ID NO: of peptide sequence | Met hod | SEQ ID NO: in USSN 09/540,217 | Nucleotide location of first codon for peptide sequence | Nucleotide location of last codon for last amino acid of peptide sequence | Amino acid sequence (X=Unknown, *-Stop codon, /-possible nucleotide deletion, \=possible nucleotide insertion) |
|--|---------------|--------------------------------------|------------|-------------------------------------|--|---|---|
| 5000 37268 B 6951 446 625 | 6898 | 37266 | A | 6949 | 3 | 620 | WFIVPISCVICNDIMAYMFGFFF GRTPLIKLSPKKTWEGFIGGFFA TVGFGLLLSYVMSGYRCFVCP VEYNNDTNSFTVDCEPSDLFRL QEYNIFGVIQSAUGWKTVRMY PFQHSIALSTFASLIGPFGGFF ASGFKRAFKIKDFANTIPGHGGI MDRFDCQYLMATFVNVYIACV |
| | 6899 | 37267 | Α | 6950 | 50 | 554 | |
| | 6900 | 37268 | В | 6951 | 446 | 625 | |
| 5903 37271 | 6901 | 37269 | Α | 6952 | 1 | 2149 | |
| 6904 37272 A 6955 I 1305 MYKGSIPGELTILNIYALNTGA PRIIKQVLRDLQRDLDSHTIIMG DFNTPLSTSDRSTRQKVIKDIQ ELNSALHQADIIDIYRTLHPKST EYTFFSAPHHTYSKIDHIVOSKA LLSKCQRIEIITNCLSDYSAIKLE LRIQKLTQNCSTIWKLINNLLIN DYWYHKEMKAEKIMFFETNEN KDTTYHHLWDTFKAYCRGKFI ALNAHKRKQERFEMDTLTSQL KELKKQEQTISKASRRQEITKI RAERKEIETQKTLQKINESGSW FVEKINKIDRPLARLIKKKREKN QIDAIKNDKGVITTDFTEIQTTIR EYYKHLYANKLERLIEKKREKDL DTYNLRRLNQGEVESLNRPITO SEIEAIINSLPTKKSPGNOGTA KFYQELTILNIYALNTGAPRTI KÇVLRDLQRDLDSHTIMGDEN TPLSTSDRSTRQKVNKDIQELN SALHQADIIDIYRILHFKSTEYT FFSAPHITYSKIDHIVGSKALLS KCQRIEITINCLSDYSAIKLELRI QKLTQNCSTIWKLNNLLINDY WYHKEMKAEIKMFFETNENKD TTYHHLWDTFKAYCRGKFIAL NAHRRQCRFEMDTLTSQLKE LKXQCQTISKASRQEITIKIRA ERKEIETQKTLQKINESGSWFV EKINKIDRPLARLIKKKREKNQI DAIKNDKGVITTDFTEIQTTIRE | 6902 | 37270 | Α | | I | | |
| PREIKQVLRDLQRILDSHTIIMG DFNTPLSTSDRSTRQKYNKDIQ ELNSALHQADIDIYRTLIPRST EYTFESAPHHTYSKIDHIVOSKA LLSKCQREIITINCLSDYSAIKLE LRIQKLTONCSTIWKLNNLLLN DYWYHKEMKAEIKMFFETNEN KDTTYHHLWDTFKAVCROKFI ALNAHKRQERFEMDTLTSQL KELKKQEQFHISKASRRQFITKI RAERKEIETQKTLQKINESGSW FVEKINKIDRPLARLIKKKREKN QIDAIKNDKGVITTDPTEQTTIR EYYKHLYANKLENLEEMDKFL DTYYHLRLNQGVESLSNRTIG SEEAINSLPTKKSPGNPGTA KF*QELTILINIYALNTGAPRFI KQVLRDLQRDLDSHTIIMGDFN TPLSTSDRSTRQKVNKDIQELN SALHQADIDIYTLHPKSTEYT FFSAPHIHTYSKIDHIVOSKALLS KCQREIITINCLSDYSAIKLELEI QKLTQNCSTIWKLNNLLLNDY WYHKEMKAEIKMFFETNEND TTYHHLWDTFKAVCRGKFIAL NAHRRQCRFEMDTLTSQLKE LKKQGCTISKARRQEITIKAL AHRRKQERFEMDTLTSQLKE LKKQGTISKARRQEITKIRA ERKEIETQKTLQKINESGSWFV EKINKIDRPLARLIKKKRERNQI DAIKNDKGVITTDPTEQTTIRE | | | A | | 1 | | |
| | 6904 | 37272 | A | 6955 | | 1305 | PREIKQVLRDLOSHTIMO DENTPLSTSDRSTRQKVNKDIQ ELNSALHQADIIDIYRTLHPKST EVTFFSAPHHITYSKIDHIVOSKA LISKCQRIEITINCLSDYSAIKLE LRIQKLTQNCSTIWKLNKLLLN DYWVHKEMKAEIKMFFETNEN KOTTYHHLWDTFKAVCRGKFI ALNAHKRKQERFEMDTLTSQL KELKKQCQTIPIKSASRRQEITKI RAERKEIETOKTLQKINESGSW PVEKINKIDFDLARLIKKRENQ QIDAIKNDKGVITTDPTEIQTTIR EYYKHLYANKLENLEEMDKFL DYTVNLRRLNQGEVESLNRPITG SEIFAIINSLPTKKSFONGFTA KF-QEELTLINYALNTGAPREI KQVLRDLQRDLDSHTIIMGDFN TPLSTSDRSTRQKVNKDIQELN TPLSTSDRSTRQKVNKDIQELN KCQRIEITINCLSDYSAIKLELRI QKLTQNCSTIWKLNNLLLNDY WVHKEMKAEIKMFTETNENKD TYHHLWDTFKAVCRGKFIAL NAHKRQERFEMDTLTSQLKE EKKQCTISTIKKASRRQEITKIRA ERKEIETOKTLQKINESGSWFV EKINKIDRIVALNTGSGSWFV EKINKIDRIVALNTGSGSWFV EKINKIDRIVALNTGSGSWFV EKINKIDRIVALNTGSGSWFV EKINKIDRIVALNTGSGSWFV EKINKIDRIVALNTGSTRIKER |